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ORIGINAL ARTICLES.

RETROSPECTIVE THERAPEUTICS.

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THE therapeutist, in order to keep abreast the times, must be not only a constant student of materia medica, but he must keep track of the "new remedies" as they appear, as well as the *new uses* of the older ones which experience is constantly developing for us.

It is only by aggregating these experiences that we can build up a sound foundation for practice, and we must be careful, of course, that our experience is not imaginative and fictitious!

We regret to admit that the practice of medicine is not yet a complete science, and perhaps it never will become such; but much has been done in this direction in the past, and the times are ominous for the future, but we must be constantly on our guard to avoid the untruthful, and to hold the doubtful, subject to further investigation.

In glancing retrospectively at therapeutic reports, we have tried to make our excerpts as concise as possible, and as full of individual differentiation as circumstances will permit, because to be of service to another we must be able to demonstrate the points of selection in such a way that they may be applied practically in other cases without *generalization*, which is the *bane* of medical practice!

To illustrate, let us take the case of an old friend who has often served us so faithfully.

The guiding symptoms of aconite are in the mental sphere, the symptoms of the mind and disposition: restlessness, anxiety, uneasiness of mind and body, sighing and frequent change of posture, forebodings, anticipations of evil, anguish of mind, and even distinct anticipations of death under some circumstances.

Some say that aconite should never be given unless the mental characteristics are present.

Aconite certainly should never be given if the patient is quiet, calm, tranquil, and bears the pain and suffering philosophically, no matter how high the temperature, how rapid the pulse, how hot the skin, or how great the thirst may be.

Aconite is never to be given first to subdue the fever, "and then some other remedy to meet the case" or to "save time" while the physician goes home to study up.

Fever or inflammation alone is never a sufficient indication for the use of aconite or any other remedy.

It is to this end—exactness in prescribing—that we should ever strive as therapeutists, and then we should not have to admit that polypharmacy is rapidly growing in our midst. So far as possible we have tried to confine the text of our report to the points which would seem to be the most reliable as guiding symptoms.

Iodoform has been reported as curative in tubercular meningitis, and, as no treatment has demonstrated its capability before, the subject is worthy consideration.

Dr. Euegne Martel (*Revue International*) reports eight cases of tubercular meningitis cured by the inunction of iodoform as follows: The head being shaved for the purpose, a pomade, made of one part of iodoform to five parts of vaseline, is rubbed into the scalp, until a gramme of iodoform has been used, twice each day, and a closely-fitted cap applied and allowed to remain.

One of these cases is said to have been kept under observation for several years, and there was no recurrence. The newly discovered *lanolin* might be a good vehicle for this purpose on account of its facility of absorption. The disease having been considered incurable under any previous treatment, should make us willing to investigate a mode which offers reasonable grounds of success, especially when statistics are in its favor, as in this case.

Dr. J. K. Banding, in the *N. Y. Med. Journal*, describes the case of a patient of his (a retired druggist) who had for many years been a hopeless victim to the morphine habit. The morphine was suddenly withdrawn and hypodermic injections of from a grain to a grain and a half of cocaine, twice daily, were substituted. "The result was brilliant and marvellously rapid. The craving for morphine immediately ceased, and all the distressing phenomena usually following the sudden cessation of the use of the drug failed to manifest themselves. Cocaine answered every purpose as a nervous stimulant. But I was somewhat alarmed at ascertaining that a corresponding demand for

cocaine was rapidly developing itself—that *a cocaine habit*, the literature of which is yet a blank, was being formed. Alarmed, and dreading the responsibility of subjecting him to unknown and probably pernicious influences, I sought immediately to diminish the dose he was taking. Against this, however, he rebelled, and my protests and arguments failed to withdraw him from the rapid formation of a habit apparently more alarming in its results than the terrible slavery entailed upon him by his former habit. My consent to the further administration of cocaine was therefore withdrawn. At that time all craving for morphine and all necessity for its use had disappeared.

"Owing to his former occupation he had no difficulty in procuring the drug in large quantities and taking it by the subcutaneous method. His familiarity with drugs made him all the more reckless, and he daily became more and more enthralled. He often took from twenty to thirty grains daily. He has frequently endeavored to shake off the habit, but he finds this impossible. It is vastly more powerful and fascinating than his previous tyrannical master. I have frequently prescribed the free use or narcotic use of morphine as an antidote, but this he has refused to use, seeming to entertain a veritable disgust for the agent which had formerly exercised such a power over his life and actions.

"About this time he sustained a severe concussion of the spine, and came under my daily observation, so that I have had ample opportunity for observing and studying the effects of the constant use of this powerful alkaloid in full doses.

"The teeth are implicated in the ravages of the drug, decay and absorption of the roots occurring.

"The appetite is completely abolished, and, while there is a subjective sensation of dryness of the mouth and fauces, they are found moist on inspection. For weeks—nay, for months—during the continuous administration of the drug and impregnation of the system by it, all desire for food ceases, and I am satisfied that inanition would ensue were not the will power exercised or forced feeding accomplished. Although very little nourishment is taken, the body does not emaciate to any such extent as under ordinary circumstances of deprivation. There must be some nervous impression or stimulation produced which greatly compensates for the want of physiological nutrition. This is probably due to a lessening of tissue metamorphosis to a minimum.

"As regards sleep, insomnia is the rule—an insomnia which is not followed by the exhaustion ordinarily thus produced. It is astonishing how night after night, during which sleep is almost entirely unknown, are succeeded by days during which the subject is not apparently greatly depressed, not unrefreshed, during which he is able—not, however, without effort and procrastination that are characteristic, increasing—to resume his daily labors, and even perform brain work of considerable complexity. The nights are sleepless, yet so great is the fascination that the patient prefers his insomnia to his accustomed rest, although aware that the most arduous duties await him in the morning.

"Nausea and excitations of the sexual functions add to the patient's distress; but these he bears, overpowered by a fascination which cannot be resisted. He experiences the paradoxical delight of 'enjoyable suffering.'

"Visual and auditory hallucinations and illusions of a very painful character make him fear that at every pass he will encounter some dread object. These cocaine effects will make cowards of the bravest men, causing them to arm themselves heavily to guard against the ever anticipated dread encounter. When the dark vistas and oppressive silence of night arrive he excludes the pure air of heaven, however overheated the room may be, and he blocks up the very keyholes of his doors to exclude unknown and unreal dangers."

In conclusion we are told that the most alarming phenomena produced by the poisonous effects of cocaine are: "The most debasing enslavement of the will, a general demoralization which is as diabolical as it is indescribable, and which tends rapidly toward depravity and to the development of everything that is degrading and ignoble in human nature. The influence of alcohol and of other alkaloids and narcotics, so well known and so frequently described, pale into insignificance when compared with that of cocaine. Habits of the most detestable character; a settled indifference to every interest of life; destruction of the most noble affections and affiliations; the utter death of friendship and of all the nobler qualities; complete disregard of all social and domestic duties—of even pressing family necessities and the common interests of daily life; the extinction of every religious spark that has previously enlivened the soul; the development of the most intense selfishness—these are the certain results of indulgence in this the most powerful and devilish drug which it has ever been the misfortune of man to abuse. The strongest morphine habit of which we can conceive is to the power and bondage of cocaine as the weakest sapling to the full-grown oak."

There is a great difference in the experiences

and in the opinions of medical men in respect to the effects of this drug, and some claim that this seeming chaos is in consequence of the unreliability of many of the preparations. It has been found to relieve the nausea of an irritated stomach not of reflex origin by lessening the sensibility of that organ.

It is said that the reported effects of chewing coca upon the natives, where it grows, is not confirmed by subsequent investigation!

Dr. W. A. Hammond says:

"I have taken as many as eighteen grains at a dose by hypodermic injection, dividing it up over some fifteen minutes. I began my experiments on myself with one grain at night. I was rather discouraged by the first dose. Every puncture I have made has left an indurated spot, and I at one time feared that erysipelas might follow. This may have been due to the condition of my system or the kind of cocaine I used. The result was pleasant; I felt happy—happier than before on that day. But I did not sleep until 4 a. m., and I had a severe headache. The exhiliration was slight—equal to that given by two or three glasses of champagne.

"The next night I took two grains with the same result and the additional one ef an inordinate disposition to write. I wrote eight or ten pages of foolscap and thought it was unusually good—the best I had ever written, in fact. So I read it over the next morning. I found each sentence complete, but the ideas were incoherent. The third night I took three grains. My energy then turned to talking. I made speeches to myself; still I could restrain myself; I had a splitting headache. I stopped for four or five days and then injected six grains, three into each arm. I was upset. I did not lose my relations to events, but I could not sleep. After three nights I injected eight grains with the same result. The next night I put in eighteen grains in six injections, two in the legs, two in the thighs and two in the chest. I am not sure that I was conscious of what I did after that. I was intensely exhilarated. I got to bed somehow. When I rose at 7 a. m. things were generally mixed. I had not arranged my papers, &c., as usual. I presume, from appearances, I had had a pretty lively time all by myself. I had a headache, my heart beat so that I could feel it and hear it when I raised my arm. But there was none of the horrible effects attributed to cocaine, no disposition toward violence; I acquired no habit, I left off easily."

Dr. Hammond does not take the gloomy view that some do of its dangers and of its easily becoming a habit. He reports a case of a melancholic who "*refused to talk*," in which that single symptom was changed to one of volubility with no other apparent effect.

When we consider that the fearful effects here so vividly delineated are certain to be reproduced in a constantly increasing ratio of frequency as the therapeutic employment of cocaine becomes more and more extended, and is followed by a reduction in the price of the article, we may perhaps venture to doubt whether Koller's much-vaunted discovery may not prove to be more of a curse than a blessing to mankind. Should "chronic cocainism" supplant the opium habit, or even rival it in prevalence, what awful spectacles—and these, too, the results, for the most part, of professional ignorance or recklessness—would beset us on our daily paths! It is none too early to sound the note of alarm upon this subject. Surely, our helpless patients incur sufficient danger from the narcotics already in use, without adding this newly-crowned "King of Terrors" to their number. The internal or hypodermic administration of cocaine by the physician, in repeated doses sufficient to produce its characteristic symptoms, should be most guarded, if not under legal penalty, at least by the common consent of the profession.

Effects of Cocaine in Cataract Operations (*Progress*, July, 1885).—The remarkable statement accredited to Dr. A. W. Calhoun, of Atlanta, concerning the noxious properties of muriate of cocaine instilled into the eyes as a local anesthetic in extraction of cataract will, no doubt, prove a genuine surprise to many who have used it for similar purposes very extensively and with increasing favor.

The writer of this paragraph has extracted ninety-three cataracts under the use of a solution of cocaine prepared by dissolving two grains of the muriate in a drachm of distilled water. The anesthetic effects have been all that could have been desired. One eye only has been lost, and that occurred in an old gentleman of peculiar temperament, who wounded the eye on the evening of the fifth day after the operation. Primary union had already taken place, and the eye was absolutely free from irritation. Through sheer curiosity he removed the dressing to find out how much he could see. The eye itched, and he scratched it with the index finger; the nail, being long, serrated at the edge, and not over clean, coming into accidental contact with the ocular conjunctiva, created a poisoned wound. The eye becoming painful, the old gentleman pressed the end of his finger firmly into the orbit on the nasal side, which, he said, relieved the pain. Ophthal-

mitis ensued, and enucleation was necessary. Ten days after this the cataract was extracted from the other eye under the use of cocaine, and to protect the dressing the patient's arms were pinioned at night. He made perfect recovery and returned home twenty-eight days after extraction with sight equal to 20-xx. It is difficult to conceive how cocaine, which is so transient in its effects when locally applied, could in any manner be able to disturb the nutritive processes in tissues to the normal external surfaces of which it has been gently applied in solution.

Cocaine-Salicylate.—Early last year Beschorner published two cases of nervous asthma which were much benefitted by cocaine. In three cases Professor Mosler, of Greifswald, has obtained excellent results. All these cases occurred in young people of twenty-three to twenty-five years of age, and were uncomplicated by any heart or lung disease. The drug was given subcutaneously, in doses of 0.4 of a gramme at the commencement of the attack. The cases were of such a nature that it is impossible to draw from them any conclusion as to the permanent benefit of the treatment. It is in the hope of inducing other practitioners to try it that Professor Mosler has published the results of his cases.

Adonidine.—Adonidine is a glucoside of the adonis vernalis, a plant of the family of Ranunculaceæ, which is indigenous in Southern Europe, and has long been empirically used in Russia in various affections, and especially in diseases of the heart. Durand, as the result of careful, systematic clinical investigations in five cases, affirms that adonidine in one-third grain doses augments the arterial tension, regulates the action of the heart, diminishes the frequency of the pulse, and increases the energy of the cardiac systole. Furthermore, it rapidly induces diuresis. Its effects are prompt, it is well borne, and the indications for its employment are the same as those of digitalis, without the dangers of the latter drug. In a case of old mitral insufficiency with dilitation, feeble and irregular pulse, œdema of the legs and feet, with diminished, albuminous urine, in which digitalis could not be used, adonidine in doses of one-third of a grain, *quatuor in die* had an excellent effect both upon the circulation and upon the action of the kidneys.

At a recent meeting of the Société de Therapeutique, M. Houchard read a note on the therapeutic action of adonidine, and exhibited a number of cardiographic and sphygmographic traces which he had obtained from patients under this mode of treatment. In one case of interstitial nephritis with heart-murmur, anasarca, and commencing asystole, the administration of five or six pills of adonidine, each containing 1-15 of a grain, produced an abundant diuresis, even though sparteine had remained without effect. Adonidine had, however, to be given up temporarily on account of the nausea, vomiting and diarrhœa which it produced. When its use was again recommenced, the secretion of urine, which in the interval had been decreased, was again rapidly increased from two to six quarts, at the same time the arterial tension became stronger, the pulse more ample and more regular, while the œdema disappeared completely. Again, in a case of typhoid fever, adonidine was found to greatly increase the arterial pressure.

Acalypha Indica.—Dr. S. A. Jones recapitulates as follows: "Hemorrhage occurs in morning. Blood, bright-red and not profuse; dark and clotted in afternoon. Pulse, neither quickened nor hard; rather soft and easily compressible. Cough, violent and in fits at night; patient has a played-out feeling in the morning and gains in strength as the day advances.

"N. B.—Worthy of trial in all pathological hemorrhages having notedly a morning exacerbation."

Curatively confirmed by Dr. Peter Cooper of Wilmington, Del., with the sixth dilution.

Fluoric Acid.—In the *Lancet* for 1881 (1., 497) Dr. Woakes relates twenty cases of goitre treated by him with fluoric acid, of which seventeen were cured. He explains his use of it by pointing to the analogy of fluorine with iodine and bromine, both of which have proved anti-goitrous remedies, so that he was induced to try this their near relative. It may have been so; but one cannot help suspecting that he had come across the facts I have related, of the production of bronchocele in a dog by fluoride of potassium in the hands of M. Maumené, and his ascription of the disease generally to the presence of fluorides in the drinking water. Anyhow, it is a pretty piece of homœopathic practice, and deserves imitation. Dr. Woakes gave ʒ ss.-ʒ ij. doses of a ½ per cent. solution.—*Hughes' Supplementary Lecture*, 1886.

Hypericum Perf.—The repute of hypericum in effects of injuries has increased of late. Dr. Gilchrist, from an experience of sixty-four operations, major and minor, that its use, internally and locally (1 to 20), precludes any after-suffering; and Dr. Helmuth tells me that it quite supercedes the use of morphia after operations in his hands.—*Hughes' Supplementary Lecture*, 1886.

Crotalus Horridus.—Dr. Hayward, in his treatise on crotalus ("Materia Medica, Physiological and Applied") makes this important statement: For

the last ten years the present writer has used crotalus in all cases of fever of all kinds when anything of a hæmorrhagic or putrescent character has been exhibited, and with the most prompt and marked effect in removing the hæmorrhagic symptoms and checking the tendency to putrescence.—*Hughes' Supplementary Lecture*, 1886.

Curare.—In the transactions of the World's Hom. Convention of 1876, we have the interesting communication of Dr. Pitet on curare. His experience with it encourages the belief that in many paretic conditions, general and local, its homeopathicity to the functional disorder will suffice to give it curative power. It is especially in such state of respiratory nerves that Dr. Pitet has found it useful. He gave the dilutions from the fourth to the twelfth.—*Hughes' Supplementary Lecture*, 1886.

Dr. C. Wesselhoeft, in his report of a proving of curare undertaken under his auspices (Publications of Mass. Hom. Med. Society, 1885) says that the choice of curare should be determined by reference to the detailed results of that proving—"such as the peculiar form of headache, the palpitation, the flashes and arterial pulsation. Where these and their minor characteristic details are present in paralytic affections, it is more than probable that curare will prove a useful remedy."

Xanthoxylum Fraxineum.—Abstract of provings by two ladies (Publ. Mass. Hom. Med. Soc., 1885). Sleepiness. Pain in right eye and temple; blurred sight. *Headache; pressure on vertex. Dyspnœa; roaring in ears; nausea and vomiting. Nose bleed. Most violent ovarian pains* from hip to thigh; connected with anticipating menses by two to five days; very profuse, repeated several times; the ovarian pain is also followed by profuse milky leucorrhea. Paroxysms of dyspnœa, especially at night, but also in the daytime; awakes with feeling as if throat were clutched; suffocative feeling very common throughout proving. Flashes before eyes; blueness of light, dizziness, roaring in ears. Lameness in back; weakness and numbness of extremities. In one prover, bowels were not affected; in the other there were black, liquid, offensive discharges. Sleep much disturbed by frightful dreams, or very heavy, with headache; dyspnœa. In connection with the dyspnœa, in the case of one prover, there is recorded violent *nocturnal palpitation of the heart;* also pain in lower portion of the lungs. Lameness and *stiffness of cervical muscles,* extending to deltoid and shoulder-blade. Chills.

These symptoms were produced by doses rising from ten to a hundred and fifty drops of the tincture. They fully corroborate the effects experienced by Hale's provers.

Terebene—Is a substance prepared by the action of sulphuric acid on oil of turpentine. It is an agreeable remedy, being a clear colorless liquid, with an odor like that of fresh-sawn pine-wood. Terebene was brought into prominence by Dr. William Murrells' strong advocacy of its use in winter cough. The dose for internal administration is five drops, given three times a day on sugar, or it may be given by inhalation by means of an atomizer. It imparts a peculiar odor to the urine, but is said to have little or no toxic action.

The only inconvenience which has ever arisen from the use of the drug was experienced by a male subject, aged sixty, after taking six doses of terebene, thirty drops in all, for chronic bronchitis. He had then to desist, on account of a profuse, bright-red papular rash, intensely itchy, making its appearance first on the left hand and then on both ankles, extending up the legs to the knees. The hand was likewise very much swollen. That this condition was due to the terebene was proved by the retrogression of the eruption, coinciding with the discontinuance of the medicine.

Carduus Marianus—Is especially indicated when there is a relaxed state of the mucous membrane of the stomach, as evidenced by recurring flatulence and diarrhœa, especially when the stools are clay-colored. The active part of the remedy is found in the seed coats and not in the kernel or nucleus. The color of the tincture ought to be a brownish-red. A dose of two or three drops per day will be sufficient, and the remedy does not require any particular regimen to be followed. It was a popular medicine in the times of Paracelsus and Rademacher.

Hoang-Nan.—In Tonquin this drug is often used successfully in large doses, and at short intervals, in cases of hydrophobia or snake-bite. Barthélemy instituted with it a preventive treatment of hydrophobia in twenty-four cases. Two patients showed the onset of the disease by various symptoms, such as complete insomnia, restlessness, hallucinations, barking, &c. In no patient, however, did the disease actually appear. The duration of the preventive treatment was on the average twelve days. The usual daily dose of hoang-nan is fifteen grains, which suffices to produce the characteristic physiological effects of the drug, viz.: increase of reflex motion, convulsion and trismus. Leserteur has given the drug to over one hundred persons bitten by mad dogs, and has always succeeded in warding off the hydrophobic attack.

Barthélemy concludes as follows: Either hydrophobia is transferred to man much more rarely than is usually supposed, or hoang-nan given to the bitten person during the period of incubation modifies so effectually the nervous system and the tissue-changes as to prevent the development of the hydrophobic virus.

Menthol.—A solution containing from two to ten grains of menthol to the ounce of water is said to afford complete and instantaneous relief in cases of urticaria and pruritus. Not only is the itching alleviated for the time, but a cure seems to be effected. In eczema, the same application causes an immediate cessation of the pain.

Boro-Citrate of Magnesia.—For renal calculus. It will dissolve them and remove all the symptoms. A dram to eight ounces of water; a teaspoonful three times a day. Dr. Blackley uses four grains three times a day for diabetes.

Myrica.—Case reported by Thomas Simpson, M. D., *M. H. Review*, October, 1886. The subject was a stout person, aged fifty, with a dyspeptic history, sallow complexion, tongue thickly coated, breath offensive, no appetite, stools pale, urine dark, lassitude extreme and great sleepiness during the day, abdominal pain and tenderness which were greatest in the hepatic region. Prescribed nux vomica 5 with unsatisfactory results. The conjunctivæ became yellow next day, and the symptoms were all worse. Prescribed myricin 1, gr. ij. every four hours, and very speedy and steady improvement followed in a few hours. This drug was selected from a characteristic symptom—tenacious, thick, nauseous secretion in the mouth. I have found it a valuable medicine in jaundice.

Syzygium Jambolatum.—Dr. W. M. Davidson, formerly of Chicago, reports remarkable results in his own case of diabetes mellitus, from the use of the syzygium jambolatum, in the *Medical Era* for April. His case commenced in July, 1881, and steadily progressed in spite of well-directed treatment. The quantity of urine reached a gallon in twenty-four hours at times. Fehling's, Trommer's and Keller's tests all showing the presence of sugar, the specific gravity varying from 1025 to 1040. Fehling's volumetric method showed the presence of ten and as high as twenty-two grains of sugar to the ounce of urine. The symptoms from which he was suffering when commencing the syzygium induced great and long-lasting thirst, mouth dry and sticky, a voracious appetite at times, and at others almost none; gradual emaciation, weariness, disinclination to move, skin dry and scurvy and often itching extremely, respiration very hurried in hot weather upon slight exertion, mind wearied, and once diabetic amblyopia. Procuring two ounces of the remedy, Dr. Davidson triturated it in a morter and macerated it in dilute alcohol for fourteen days. He partook of this tincture every three hours for three days, noticing a marked decrease in the amount of sugar and in the quantity of urine. He then took it but twice daily for ten days, when the quantity of urine was found to be normal, no traces of sugar present, and the specific gravity reduced to 1010. Numerous tests have been made since, but no sugar has been discovered.

Chloride of Sodium.—Dr. Branche, as the result of his own observations in man, says that the blood, the saliva and the urine show a notable increase in the proportion of the salt a few minutes after its ingestion. Its effect on digestion is not only to augment the secretion of gastric juice, but also to increase its acidity. After taking ten grammes daily, more than the usual quantity, for two months, the number of blood corpuscles was found to have increased, with a diminution of the albumen and watery constituents of the blood. The excretion of urea is increased. The condition likely to derive most benefit from a course of treatment with chloride of sodium is struma, but anemia and tuberculosis are also improved, if not cured. Dr. Pidoux recommends phthisical patients to eat largely of salt at meals. Goat's milk, rendered saline by the addition of twelve to fifty grammes of salt to the diet of the animal daily, is highly spoken of. Bouchardat has remarked that well-salted meat diminishes the thirst of diabetic patients to some extent, and lessens the excretion of sugar. In the form of baths, its good results are well known in the treatment of chronic rheumatism, gout, gravel, and biliary calculi. Several observers have seen malarial fevers arrested by doses of salt varying from ten to fifteen grammes. In solution, it has been recommended for intravenous injection in cholera, and to destroy the oxyuris vermicularis in children. The effect of salt is antidotal to nux vomica and curare, and to lead and silver salts. In conclusion, Dr. Branche points out the benefit to be derived from the use of mineral waters of the Friedrichshall type, containing chloride of sodium, whereby the distressing effect of saline laxatives is counteracted by the salt.

Dr. Allard Meminger (*N. Y. Med. Jour.*, July 31, 1886) highly lauds chloride of sodium as a remedy for Bright's disease. He has only tried it so far in four cases, but his observations are of value, because it alone was used, to the exclusion of all other drugs. At first he orders ten-grain doses of the chloride, contained in gelatine capsules,

three times a day. The second day of treatment he increases the dose to two capsules three times a day, and every other day he increases by one capsule until the patient is taking five capsules three times a day. The good effects of the treatment will now be apparent. At this juncture he orders the chloride to be diminished in quantity, and he has so far found that, after the system has thus been brought fully under its influence, it requires but two capsules, three times a day, to keep up the desired effect. The effects of this treatment were most marked in each of his four cases.

CLINIQUE.

THE SURGICAL TREATMENT OF CHRONIC SUPPURATING SURFACES.

By H. I. Ostrom, M. D., New York.

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BETWEEN the pathology of acute and chronic suppurating surfaces there are sufficient differences to suggest widely diverse methods of treatment. Acute suppuration, though not necessary to repair, is part of an essentially reparative process. Conversely, chronic suppuration belongs to a process that does not proceed beyond the proliferation of embryonal cells—a process that, though not necessarily destructive, does not enter into the reconstruction of tissues.

It will be understood that the terms acute and chronic suppuration are here used as convenient methods for describing conditions of which they are no more than the symptoms, the most prominent symptoms it is true, and as concerns the actual constituents of the pus discharged not in all cases to be distinguished from each other, but symptoms that depend entirely upon the behavior of granulation tissue, whether this is toward the reconstruction and building up of lost parts or whether toward the persistence of immature indefinite cell types. Granulation tissue, therefore, which always develops when there is a loss of continuity, and which reaches its highest degree of expression in the reconstruction of connective tissue, vascular tubes and nervous cords, is really what we have to deal with in suppurating surfaces.

This tissue, inflammatory new formation, is the result of several local processes that are set in operation almost as soon as the continuity of the structures is destroyed. In all cases otherwise healthy, this product of inflammation proceeds through a series of developmental changes that more or less perfectly, as far as function is concerned, result in the reproduction of the part lost, on the union of the separated surfaces; it is, indeed, the one thing essential to the cicatrization of wounds. It is built up of embryonic cells, derived from pre-existing tissue-cells, and also from the leucocytes of the blood, and is arranged in the form of papillæ. Under the influence of health it is slowly formed, and the fibroblasts, from which alone the new connective tissue can arise, do not pass on to the large multinuclear or giant cells, which, when present in any number, interfere with the healing process.

Now, at the stage in the morphology of granulation tissue when embryonic cells do not develop into fibroblasts—and hence, if I may be allowed the expression, miss their opportunity of following in the direction of their inheritance and of reconstructing—granulation tissue becomes a pathological new formation, an inflammatory heteroplasia. Derived from a perfectly physiological process, as indeed all pathological processes are derived, but pathological in the sense that its structure is embryonal, and that its history includes no power to develop stable tissue bodies, in an environment of mature cells, it remains a permanent center for the proliferation of immature cells, and as such is not subject to the organic laws which maintain the perfect equilibrium that we recognize as health.

In this pathological new formation is seen the pyogenic membrane of abscesses, I believe more frequently of chronic abscesses, and of old suppurating sinuses, the "tissue vegetations" in strumous synovitis, and possibly also the lining tissue of strumous suppurating glands. Whenever, indeed, chronic suppuration is established this pathological inflammatory new formation exists as the cause of the continued formation of pus.

In the great majority of cases the process of granulation proceeds to a perfectly normal termination, and we may therefore infer that the natural course of wounds is to pass through regular stages until the reproduction of tissue has been accomplished; and, further, that when this process is not consummated by resolution the cause must exist in something that influences the nourishment of cells, and that is powerful to control the systematic construction and building up of tissues. With local causes, as long continued irritation, which will in time induce a condition that closely resembles the chronic suppurating surface, though it may be questioned whether the pathological new formation is the same, we are at present not concerned. The causes are local,

and the effects will generally disappear with their removal. But it is the etiological factors that influence an apparently simple inflammation to become a chronic inflammation, that prevent granulation tissue, which naturally tends to repair, from reaching a higher structure than embryonic tissue, that here claim our attention.

The etiology of struma has within the past few years been revised. In the light of present pathology we can no longer look upon scrofula as "a tendency in the individual to inflammations of a peculiar type," but we must regard it as an infectious disease, due to a definite poison that finds its soil for development in "persons whose tissues exhibit a certain frailty or susceptibility to injury that makes them particularly liable to chronic inflammatory disorders."—(*Ziegler.*)

Now, in these chronic suppurating surfaces, upon which the granulation tissue remains embryonic, we find conditions that favor in a pre-eminent degree the development of scrofula as at present defined, and we also find in these inflammatory pathological new formations a clinical history that supports such a diagnosis.

As we have before said, this granulation-tissue, which becomes more transparent and gelatinous as it retains and assumes the characteristics of embryonic tissue, has become a distinct pathological structure, and is entirely self-supporting. In common with other pathological new formations it is incapable of evolving higher tissue forms, and must either continue a permanent embryonic body, or degenerate into pus, and so be the cause of its own destruction. The history of the chronic suppurating surfaces of which we have spoken shows that both these conditions obtain, and together constitute the disease, but the degeneration of cells never proceeds to the extent of destroying the pathological cell center and restoring health.

Primarily, as forming a scientific basis for treatment, and, secondarily, because of the success that has attended active measures, I would urge a more general application of operative surgery to these cases.

The growth is pathological; it has passed beyond physiological assistance, and by no process that we are familiar with can it either be absorbed, or converted into physiological tissue, that is, into reparative tissue. Therefore it must be removed, and removed most thoroughly, for if a piece remains it may form a nidus for future growth. That the simple removal of the embryonic tissue will effect a cure cannot be maintained; the system must be treated for its predisposition, and the soil that makes possible the growth of the virus annihilated. But it will be remembered that we are at present concerned with the surgical treatment only.

The method that has been proposed by other surgeons, and the one that I prefer in all cases, is that of thoroughly exposing the surface and scraping it with one of the sharp spoons that have been devised for that purpose. I generally use Volkman's spoon. The large handle gives an advantage in operating that other instruments do not possess. More conservative methods have not given me a success at all commensurate with that which has attended my use of the more radical measures, and I have come to look upon the injection or application of irritants, as generally indifferent substitutes. The cures effected by them are frequently deceptive, especially in the case of sinuses and fistulæ, and finally result either in the refusal of the patient to submit to further treatment, or to an operation that should have been performed in the beginning.

As to the operation, it is sufficiently simple in the majority of cases. The surgeon's knowledge of anatomy will enable him to avoid large vessels, and this knowledge will be his principal guide to the line of incision. The entire granulating surface should be scraped, until firm healthy tissue is reached, and then by means of deep and superficial sutures the edges of the incision may be brought together without fear of continued suppuration if the operation has been performed with antiseptic precautions. In this way union by first intention may with almost certainty be predicted, even when the sinuses are extensive both in depth and length. In this way an anal fistulæ may be treated successfully, and much more rapidly than by the old method of inviting granulation from the bottom of the fistulous track.

As in other operations, much of the success depends upon the dressing of the wound. I have found nothing to equal iodoform as a dressing in these cases. After all bleeding and oozing have ceased I *lightly* dust iodoform over the wounded surfaces, and when they are brought together apply iodoform and a pad made of sublimated gauze and cotton in the usual manner, retaining with a firm, well-adjusted bandage. The nicety of the latter step is of the first importance in bringing about union by first intention, and a speedy cure.

The following cases, for the record of which I am indebted to my late house surgeon, Dr. Campbell, recently occurred in my service at the Ward's Island Hospital, and will illustrate the simplicity and effectiveness of the radical operation for the cure of chronic suppurating surfaces:

CASE I. **Periarticular Abscess and Sinuses of the Left Knee.**—Jane H., a domestic servant, entered the hospital with an inflamed and suppurating bursa patella of the left knee, the result of injury. As usual in such cases the purulent inflammation was not confined to the bursa itself, but had attacked the areolar tissue that is in contact with the bursal walls. After two months, one of which was passed in other hospitals, and occupied with the application of poultices and treatment calculated to reduce vitality, three sinuses remained. These I opened thoroughly, and scraped with Volkman's sharp spoon. The operation was performed under bi-chloride irrigation, and the dressing was with iodoform and sublimated cotton. Ten days after the operation, and when the sinuses had almost healed, another sinus was found, having an obscure opening that followed the course of the outer border of the rectus femoris muscle for about eight inches. This also was opened with the same precautions, and dressed in the same manner as the other sinuses. The healing of the last sinus was remarkably rapid and mostly by first intention. She was discharged cured about two months after admission, with a functionally perfect knee.

CASE II. **Periarticular Abscess of the Right Knee.**—John McD., aged eighteen years, a baker, was admitted to the hospital with a periarticular abscess of the right knee, the result of an injury received three weeks before. The abscess developed slowly, but little inconvenience resulting from the injury before the sixth day. He was treated in one of the city accident hospitals with the routine practice of poultices, and finally transferred to the Ward's Island Hospital. I then found the anterior aspect of the knee to be occupied by five sinuses. The surrounding tissues were disorganized, and the unhealthy granulation tissue developed to such an extent as to convey the impression of fluctuation when pressure was made over the sinuses. The superficial parts were purple, and the leg below the knee œdematous. I opened these sinuses under bichloride irrigation, and dressed the wound, first with iodoform until the granulations showed some disposition to become exhuberent, and then with Boracic acid ointment. The extension wounds healed without complications, and the boy was discharged cured six weeks after the operation.

CASE III. **Idiopathic Mammary Abscess, Glutear Abscess with Sinuses.**—M. M., widow, aged thirty-eight years, seamstress. The history shows nothing of interest. Three years before admission an abscess developed in the right mammary gland, which was allowed to open spontaneously. Several sinuses resulted, one of which followed the sternum almost to the ensiform cartilage. This healed, but a fistulous opening on the inner border of the mammary gland continued to discharge characteristic pus. The nipple was retracted, and seemed to be attached to the chest walls. An abscess over the sacrum followed an attack of sciatica. This abscess enlarged, until at the time of admission to the hospital it involved a considerable part of the gluteal region, measuring twelve inches from side to side. My predecessor in service, Dr. Thompson, opened two of the sinuses, but when my term of service began I found these only partly healed, and another sinus formed that led across the right gluteal region to a point over the trochanter major. This I opened very thoroughly and scraped with Volkman's spoon. The dressing consisted of iodoform and iodoform ointment, and in six weeks all the sinuses had healed. On the 10th of August I opened the mammary sinus and scraped it with the spoon. This sinus was about six inches long and was surrounded with most dense cicatrical tissue. A drainage tube was placed on the floor of the wound and the edges of the wound secured with cat-gut. Iodoform dressing. The breast was not disturbed for four days, when it was found to have healed by first intention. The drainage tube was removed, and in one week from the operation the entire wound had healed. The results in this case were better than I had reason to expect they would be. The abscess on the sacrum was one of the most extensive, and one of the deepest I have ever treated, and I cannot but regard its rapid cure as depending in a large measure upon the thorough removal of the unhealthy granulation tissue and upon the use of iodoform as a dressing.

CASE IV. **Palmer Celulitis, Abscesses, and Multiple Fistulae.** Mary O., married, domestic, aged thirty-five years. Eight years ago this woman received a slight injury on the right wrist, which was followed by a local abscess. This healed, and for several years gave no further trouble. Four years before admission to the hospital an abscess formed in the abductor pollicis muscle, since which there has been a history of repeated abscesses in the palm of the hand, and in the wrist. At the time of admission two openings existed, one in the center of the palm, and the upper one, about an inch above the radio-ulnar articulation. These two openings were found to communicate beneath the palmar arch, and were opened as thoroughly as possible without cutting those vessels. The sinus was also found to extend upwards for about five inches below and beneath the flexor carpi radialis, and the palmaris longus.

When the fistulous tracks were laid open, the incision, therefore, extended from the palm of the hand to the middle third of the fore-arm, with the exception of about half an inch over the palmar arch. This long track was scraped with the spoon, and under the palmar arch, where it was impossible to pass the spoon, with the chain saw. Four drainage tubes were introduced, and the intervals held together with cat-gut. The arm and hand were dressed with iodoform and placed on a straight splint. The healing progressed without interruption, and two months after the operation the woman called at my office to show me her perfectly healed and useful hand. As during the operation it was necessary to cut the palmar fascia, I was agreeably surprised at the time of her call to find no contraction of the fingers; the only functional effect of the operation that remained was a slight stiffness of the index finger, but this had gradually become less marked.

In this class of operative surgery it is a matter of the first importance to leave no pocket either at the end or on the sides of the sinus, in which pus may collect and from which it may burrow. I have on several occasions been called upon to make good the work of other surgeons, when the defect resulted from not following this rule. Abscesses will heal more readily if the incision is carried to the circumference of the purulent collection, and sinuses will unite as any other wound, if care is taken to discover and open the suppurating canal in every part. To accomplish this is not always a perfectly simple procedure, for sometimes the sinus runs so deeply, or in such a direction that an incision carried to its termination would involve unnecessary risk. In such cases counter drainage may be made by introducing a drainage tube through the tissues into the most dependent part of the canal. I found this to be necessary in one of the sinuses in Case III. The tube may be removed with perfect safety as soon as healing begins in the sinus. Then, again, we must consider the relation of the direction of the sinus to the most usual position of the patient, because the treatment becomes a question of drainage. It is therefore in some cases necessary not only to convert the suppurating canal into an open wound, but also to extend the incision in a direction in which position will favor drainage.

Variola-Tuberculosis.—Dr. Davy, Cincinnati Academy of Medicine (*Lancet and Clinic*), had a case of advanced tuberculosis who was attacked with variola, and on recovery from the latter disease all lung trouble was gone, and patient remains well.

RETRACTION OF THE PENIS.

BY E. R. CORSON, M. D., SAVANNAH, GA.

AMONG the "Gleanings" in the December number of *The Times* is a case of retraction of the penis, culled from the *London Medical Record* of February 15th, 1886, which prompts me to report the following case as bearing upon this singular condition:

A lady brought her child to me on account of difficult and painful micturition. The little patient was a well-developed, vigorous boy of eighteen months. I found on examination a rather retracted penis, with a tight præputium. I learned, to my surprise, that the child had been circumcised, and by a physician whom I knew to be a competent man. I informed the mother that the operation had evidently not been a radical one, and advised her to have it repeated. She begged me first to see what I could do without the knife, so I stretched the foreskin with a three-bladed speculum, constructed on the principle of Elsberg's dilating nasal speculum, exposed the glans and cleared out the smegma. The præputium soon slipped over the glans again, and the violent pain and spasm on making water continued.

I again advised a radical circumcision, to which the mother assented. Under ether I removed a goodly portion of the præputium, slit up and turned back its inner membrane, exposing well the glans and the rectoglandular sulcus, assuring the parents that the child now would have no further trouble. The parts were dressed with carbolized oil.

On visiting my little patient next day I was as surprised as discomfited to find that the penis had retracted to such an extent as to be almost on a level with the skin, allowing what was left of the præputium to cover the glans again. Despite every effort to keep the glans exposed the penis continued to retract, like the head of a tortoise, and the little fellow was left apparently worse off than before, with his organ of intromission almost level with the surrounding skin. The spasmodic and painful micturition continued, and was increased by an attack of measles which prostrated the little patient.

In the course of three or four weeks the penis gradually lost its timidity and made an effort to rise above its surroundings, though with its head still tightly covered.

I was permitted again to operate, this time cutting away the larger portion of the skin covering. The wound healed kindly, leaving the glans

at last uncovered as in an ordinary circumcision. The spasm and pain on micturition disappeared, and to-day, almost a year since the operation, the parts have a natural appearance, and the child's growth, both mentally and physically, has been all that a fond mother could desire.

This retraction is evidently reflex and passive, and due to a complete emptying of the erectile tissue blood vessels, as there are no muscles to produce it. I have performed the operation of circumcision a good many times, and never before met with or heard of any such difficulty as above described. The telescopic action of erectile tissue hyperæmia is as striking as it is common, but the other extreme, or back-action, where the parts become absolutely "telescoped" through erectile tissue anæmia, seems much less common.

LESIONS OF THE CORNEA FOLLOWING THE INSTILLATION OF COCAINE.

NUMEROUS instances have now been recorded (*Brit. Med. Jour.*) in which the use of cocaine has been followed by local ill effects. These may be divided into two classes, namely, suppurative panophthalmitis and lesions of the cornea. The former, being in all probability due to septic infection, cannot be said to depend directly upon the use of cocaine, except in so far as cocaine increases the absorbent properties of the cornea, and direct inoculation occurs from impurities in the solution used.

The corneal lesions which have been observed are of two kinds: 1. An affection of the epithelial layer only, consisting of vesication or desquamation, and (2) interstitial opacities, often taking the form of a kind of striated keratitis extending from the wound.

One of the first to observe the superficial changes was Paul Bunge, and very many instances have been recorded since.

It has been shown by Wurdinger's experiments upon animals that the intensity of the changes depends more upon the duration of the experiment than upon the concentration of the solution or the frequency with which it was applied. By dropping distilled water upon the cornea between the applications of the cocaine changes which had already occurred were not removed, but their increase was prevented, Microscopic examination of the altered areas showed that the epithelium, where not removed, was thinned out, and that there was also considerable thinning of the anterior layers of the true corneal tissue.

As regards the interstitial opacities of the cornea, Dr. Wood-White appears to have been the first to suggest that they were due, not to the cocaine itself, but to the simultaneous employment of a solution of corrosive sublimate. He states that he has frequently used cocaine alone and in conjunction with boracic acid, and has never seen any ill effects arising from it, but that in the only cases in which he at the same time used a solution of corrosive sublimate (five cases of cataract extraction) a pearly-white opacity extending from the wound, was visible on the second day. This cleared up completely in all the cases in a few days.

Dr. Wood-White has omitted to state the strength of the solution of corrosive sublimate used by him, and also whether he has used the same solution alone in other cases. But, assuming that the solution was of the strength ordinarily employed, the conclusion seems a reasonable one that the effect produced was in some way dependent upon the combined action of the cocaine and corrosive sublimate, and some of Wurdinger's experiments appear to support this.

Dropping fluorescine into a cocainized and into a non-cocainized eye at the same time Wurdinger found that in the non-cocainized eye only the superficial layers became fluorescent, but that in the cocainized eye the deeper layers also became affected. When the epithelium was removed from a limited area, and "methyl-blau" was dropped upon the abraded surface, it alone became colored in the non-concainized eye, while in the cocainized eye the coloring matter extended through the whole cornea. It seemed clear, therefore, that the effect of the cocaine was to increase the absorbent power of the cornea. Finally, Wurdinger found that weak solutions of boracic acid, corrosive sublimate, and even of common salt, which in the normal eye were perfectly innocuous, in the fully cocainized eye produced a turbidity of the cornea, identical with the early stages of the striated keratitis, which sometimes follows cataract extraction.

If subsequent experiments should verify these couclusions it is evident that the views at present held as to the advisability of employing corrosive sublimate as an antiseptic will have to be considerably modified. It is of the utmost importance that these investigations should be carried further, in order to ascertain what is the weakest solution of corrosive sublimate capable of producing the lesions described, and the weakest that is efficient as an antiseptic. In the meantime steps should be at once taken to ascertain whether any interstitial lesions of the cornea have ensued when cocaine has been used alone. It is significant that most of the reported cases have been fur-

nished by institutions in which corrosive sublimate is used as a matter of routine, but in many instances it is not stated whether it was actually used or not, the point not being considered of any importance at the time of publication.

RETROSPECT OF DISEASES OF THE EAR.

BY T. M. S.

Improvement In Hearing After Section of the Tympanic Membrane. (*Brit. Med. Jour.*)—The author followed the advice given by Politzer in regard to dividing the fibrous bands of cicatrization the result of perforation of the tympanic membrane. The first case was an infant, which after a suppurative inflammation of the ears could not hear anything with the left ear, and only 6 cm. with the right. After dividing the cicatrix the hearing was increased to 18 cm. for both ears. The second case was a man, 52 years of age, who had otitis media suppurativa at the age of 14 years, in consequence of scarlatina. The perforation in the left ear was replaced by a thick semi-lunar cicatrix whilst hearing for the watch was by contact only. After section the watch could be heard at one-fourth of an inch, but the amelioration for the voice was especially marked.

Lucæ, of Berlin, observes that when the voice is heard only in the neighborhood of the ear, section of the membrane renders hearing worse, but that when the deafness is of medium intensity section of the cicatricial tissue leaves the hearing stationary or improves it.

Fistules of the Mastoid Cavity. (Todd. *St. Louis Med. Jour.*)—The cavity of Schrapnell can be attacked by suppuration separately from the rest of the tympanic cavity. The mastoid cells are then directly threatened, for the pus, retained by the anfractuosities of the cavity and by the elevated position of the perforation, escapes with difficulty. Very frequently the abscess does not communicate with the Eustachian tube, so that we are deprived of a good means of diagnosis and of cleansing the abscess. The dry treatment is not so efficacious here as in other suppurative conditions of the ear. If the tampon cannot be used we must resort to the syringe. The cure may be delayed for a long time, but the physician may be content in having escaped the vascular and cerebral complications which constantly threaten.

Deafness in the Course of Bright's Disease. (*Glasgow Med. Jour.*)—Dr. Downing reports the case of a man, 27 years of age, who suffered with chronic nephritis, and was suddenly attacked with pains, followed by deafness, in the right ear. Ten days later the left ear was similarly affected. Conversation in a very loud tone of voice could not be heard. The tympanic membrane did not present any sign of lesion, and insufflation by means of the sound did not give any relief. At the end of two weeks the accidents disappeared suddenly, and the hearing was restored. The cause was supposed to be a labyrinthine lesion, œdema, or more probably a hemorrhage.

Otitis Media Purulenta Tuberculosa.—1. Tuberculous otorrhœa has distinguishing characteristic symptoms from non-tubercular otitis, which we know under the name of chronic suppurative otitis media.

2. These conditions are curable: (a) When the tuberculosis is limited to the ear; (b) and even when there are secondary tuberculosis in other organs, provided that the patients are not in the last stages of phthisis.

Ulceration and Perforation of the Membrana Tympani.—Dr. Buck (*N. Y. Med. Journ.*) reports three cases in which this process was painless or nearly so, and probably of tubercular origin. He concludes: I am disposed to consider the following as the distinguishing features of tubercular inflammation of the middle ear in its incipient stages. 1. The tendency to localize itself in the vicinity of the upper and posterior portion of the membrana tympani; but why the disease localizes itself in the tympanic mucous membrane, in the fibrous structures of the membrana tympani or in the bone of the immediate vicinity, I am unable to determine, although I suspect that in some cases the bone substance is the starting point of the disease. 2. The marked insignificance of the pain or even its entire absence; and 3 (a point to which I have called attention in a previous publication, and which was observed in only one of the cases here referred to), the intolerance of any but the simplest and gentlest local remedial measures.

Progressive Development of Dermoid Layer of Auditory Canal.—Dr. Hooper (*Boston Medical Journal*) presented to the Medical Society a layer of epidermis, 11 cm. long and 6-8 cm. wide, which he had removed from the auditory canal. It had been removed with a mass of cerumen and was rolled upon itself. This confirms the observation of Blake relative to the progressive development of the external layer of the membrana tympani and the dermoid covering of the canal.

Round Celled Sarcoma of the Ear (Green, *Arch. Otol.*).—The patient was 23 years of age and showed on examination a diffused tumor at the point of the left mastoid apophysis, which breaking down gave exit to a fungous mass, softened in spots, and bleeding at the least contact. The tmeaus was filled with this fleshy mass, which resembled a polypus adherent to the posterior wall. The general health was bad. At the end of three months, during which the tumor had constantly increased in size, it measured 16 cm. by 12 cm. Two months later the patient died of exhaustion. No autopsy was permitted, but the microscope showed undoubted evidence of the character of the growth.

On the Central Connections of the Auditory Nerve.—Baginsky (*Jour. Med. Sci.*) has studied the origin and central course of the auditory portion of the eighth nerve in the rabbit by observing the degenerations following destruction of the cochlea in young animals. He contrived an operation by which the cochlea was completely destroyed, while the other parts of the labyrinth remained intact, and found that the resulting degenerative changes affected solely the hinder root of the auditory nerve, the anterior root being unaltered. The fibres of the posterior root are thus shown to have no connection with the inner and outer auditory nuclei, but to spring in part from the anterior or accessory nucleus and the tuberculum laterale of Stieda, and in part to course round the restiform body into the arcuate fibres of the medulla oblongata. Other fibres appear to pass through the corpus trapezoides to the superior olive of the same side. Having crossed the mesial plane the auditory fibres are found in the lower fillet of the opposite side, running to the inferior quadrigeminal and internal geniculate bodies, which are believed to be related to the auditory nerve in the same way as the superior quadrigeminal and external geniculate bodies are to the optic nerve. No changes were found above the mesencephalon

in the cerebrum, or in the cerebellum and its inferior peduncle.

On the Skin of the External Auditory Meatus.—The skin lining the deepest part of the external auditory meatus is generally described as presenting papillæ disposed more or less regularly in longitudinal rows. This statement is corrected by Kauffmann, who demonstrates that the prominences seen in frontal sections of the meatus are caused by fine ridges of the cutis, running transversely to the axis of the canal and parallel to the margin of the tympanic membrane. The ridges are most numerous on the floor of the meatus, less frequent in the roof, and disappear on the anterior and posterior wall. Only exceptionally are a few small papillæ seen projecting from some of the ridges. The ridges first make their appearance between the fourth and fifth month of fœtal life, and they appear to become less marked in old age.—(*Jour. Med. Sci.*)

Trephining for Intracranial Abscess in Connection with Suppurations in the Ear (Hulke, *Lancet*).—These abscesses are frequent and nearly always fatal. At the same time the diagnosis is undoubtedly difficult. While the pathological anatomist can demonstrate the conditions known as limited and diffuse meningitis, thrombosis of the cerebral sinuses, and abscess in cerebrum or cerebellum, the clinicist cannot yet with certainty distinguish between them. Two symptoms especially characteristic of otitic intra-cranial abscess are an abnormally slow pulse and low temperature. Three cases are given. CASE I. Chronic otorrhœa; caries of the petrosal bone; abscess in the cerebellum, supposed to be in the temporo-sphenoidal lobe. The patient, a male, tall and muscular, complained of severe pain in the left half of his head, most intense in the occiput, radiating over the temporal and frontal regions. A spot above the pinna of left ear was extremely tender on pressure, while firm pressure caused pain in the head, lasting two hours or more. There was also distinct but less acute tenderness above and behind the mastoid process. There was a discharge from the left ear, and the watch was inaudible. The face seemed to be slightly drawn to the right, and the furrows in the left side seemed less deep than those on the right. There was a doubtful deviation of the tongue to the left. He could not close the left eyelid as tightly as the right. Mastication caused intense pain in the temporo-maxillary joint. Otorrhœa was present in the right, as also impaired hearing. The otorrhœa had existed since childhood. Three weeks previous to his admission to the hospital he began to have severe pain in the left ear, and a few days later pain in the back of the head, accompanied for the first two days with vomiting. The patient grew worse, and coma threatened. The squamosal bone was perforated with a small trephine, the pin of which was set at the distance of one centimeter above the external auditory meatus. The dura mater was divided, and a blunt-ended director was passed through the opening toward the tegmen tympani until its end impinged upon the upper surface of the petrosal. No pus escaped. The coma deepened and death ensued. Autopsy: There was a little hemorrhage at the parts around the wound, but no inflammatory changes. In the left cerebellar hemisphere, about the center of its anterior border, where this is in contact with the petrous part of the temporal bone, there was an abscess the size of a walnut, containing thick greenish-yellow pus. This was in contact with a small aperture in the dura mater, through which pus had burrowed from a carious portion of the temporal bone in connection with disease of the internal ear. The walls of the abscess were almost smooth and fairly well defined. The left cerebellar hemisphere was considerably swollen, and it had evidently compressed the pons and medulla. There were no other marked changes in the brain. The author adds that the post-mortem inspection left no doubt that this abscess could have been tapped by trephining the occipital bone below the level of the attachment of the tentorium; so it has ever since been to me a subject of regret that this was not done immediately upon the failure of the puncture of the temporo-sphenoidal lobe. Whilst it failed to accomplish the purpose for which it was undertaken, the operation was not wholly without value, tending, as it did, to show its relatively slight dangers.

CASE II. Chronic otorrhœa; polypus; carious perforation of the tegmen tympani and abscess in the temporo-sphenoidal lobe. A young girl, nineteen years of age, with a history of purulent otitis of several years standing. Four weeks ago she fell, striking the back of her head against a table. Her scalp was not cut, but she seemed dazed and stupid for a day or two after. During the past three weeks she had complained on and off of headache, and she had occasionally vomited. On admission to the hospital there was intense pain at the vertex and in the right side of the head. There was great tenderness over the mastoid process, and in a less degree over other parts of the head on the right side. The right side of the face appears slightly wanting in expression. The mastoid was opened with a gouge, but no pus was found. Two days later her condition was more grave. The occipital bone was perforated about two centimeters behind and inwards from the mastoid process, the crown of the trephine encroaching on the inferior curved line. On dividing the dura mater a small quantity of colorless limpid cerebro-spinal fluid welled out. A grooved blunt director was passed in three directions parallel to the surface of the petrosal, but no pus was found. The flap was laid down and the wound closed, provision being made for drainage. Five days later she was in a semi-comatose state, and no longer answered when questioned. Right pupil dilated and left contracted. The eyelids sensitive to touch. Epigastric, abdominal and plantar reflexes normal; no ankle clonus. During the examination the face became flushed and the breathing slightly stertorous. The left forearm was convulsively pronated, and both hands and feet were spastically flexed. This attack was repeated four times in twenty-four hours. Mastoid and occipital wounds are free from inflammatory swelling; about an ounce of laudable pus escaped from the occipital drainage-tube. At midday she moved spontaneously the right arm and withdrew it when it was slightly pinched. She moved the left arm only when firmly pinched, and this but feebly; paresis of this arm was present. The squamosal was now trephined above the external auditory meatus, the dura mater divided, and a grooved director passed in the direction of the tegmen tympani; about half an ounce of thick, fetid, dark, greenish yellow pus escaped. The opening in the dura mater was enlarged sufficiently to permit the insertion of a drainage-tube, and the wound dressed. Death twenty-four hours later.

Autopsy: Cerebral convolutions extremely flattened, and sulci effused. Flattening almost equal, and not more marked on the right than on the left side. No evidence of meningitis except about the center of the right middle temporo-sphenoidal convolutions, where over an area apparently about the size of a shilling the brain was adherent to the parietal layer of the arachnoid. This lobe

(right temporo-sphenoidal) was very soft, and in attempting to remove it, it broke down and some pus escaped. The left half of the brain was then removed, and subsequently the right half and the membranes. The upper surface of the petrous bone close to the juncture with the squamous showed several areas where perforation had occurred, and where the pus was evidently present in the bone beneath and was welling through the perforations. There was another perforation at the juncture of the squamosal and petrous bone in the posterior fossa of the skull where the lateral sinus grooves this latter. This had caused thrombosis of the sinus and complete obstruction of its lumen for a distance of nearly an inch. There was no sign of inflammation in the neighborhood of the cerebellar wound, nor was there any abscess in the cerebellum. The abscess in the temporo-sphenoidal lobe was well-defined and about the size of a walnut.

CASE III. Chronic otorrhœa; abscess in cerebellum evacuated by trephining the occipital bone. A lady, fifty-five years of age, and long subject to a purulent discharge from the right ear. The premonitory symptoms were aching in the right ear and right side of the head, with stiffness and uneasiness in the nape. This was followed by a comatose condition. The mouth was slightly drawn to the left; this had been observed before the present illness. She occasionally lifted her left hand to her mouth and left cheek and held it there; an old habit. Shortly before she was seen in the above condition she had attempted to leave the bed, moving both legs. Pulse slow and temperature low. It appeared that the history and present symptoms indicated abscess in the cerebellum—the depth of the coma, unattended with any evidence of left hemiplegia, was unfavorable to the supposition of abscess in the temporo-sphenoidal lobe—and that in the presence of this, its evacuation by trephining the occipital bone offered the only prospect, slender as it was, of saving life. The operation was followed by relief to the breathing and the coma lessened; troubled by mucus in the throat she rose upon her elbow to expel it. Consciousness did not return, and she died on the following forenoon.

The author says these cases are presented as originally noted, with a desire not to prejudice judgment. They show the powerlessness of trephining to relieve at the very late stage at which it was practiced. In the future we must strive at perfecting the early diagnosis of abscess, and this once made, we must boldly and without hesitation apply the same general principles of surgery which govern the treatment of abscess in any less noble part of the body.

Trephining for Abscess or Mastoid Disease.—Dr. Burnett (*Med. News*) says: To trephine for cerebral abscess, which has resulted from chronic aural disease, is to operate on a moribund patient, and to hasten surely the fatal issue. The time to aid such a sufferer was when the chronic purulent otorrhœa could have been checked, and before it had induced necrosis of bone or embolism. The only thing that might justify an operation after the abscess has formed, is the detection of a sinus leading to it from the mastoid or squama.

An operation on the mastoid is seldom needed, because an acute inflammation originating in, or limited to, the mastoid cells, without possibility of other escape, rarely if ever occurs; and for such a disease alone would trepanation of the mastoid cortex be demanded. Nor will an operation be of any avail when inflammation of the lateral sinus is present, a condition often found as the explanations of symptoms attributed to mastoiditis. In many cases the local depletion of the parts following the incision gave the relief and not the mastoid perforation. If the cortex is diseased it is perfectly proper to remove such diseased bone, but unless it can be shown that to operate upon a healthy cortex will prevent the advance of caries upon the inner wall, he would say that he does not know when trepanation of the mastoid should be performed. It remains to be shown that an advance of necrosis can be prevented by such an operation. If pachymeningitis has ensued, an operation on the mastoid is useless.

Chronic Inflammation of the Attic of the Tympanum. Operation (Sexton, *Med. News*).—The operation should not be attempted where the membrana tympani remains to a sufficient extent to respond to ærial vibrations of sound in any effective manner. In these old cases, however, it will usually be found that the major portion of the membrana vibrans has been destroyed, so that there is no danger of injuring the hearing power of the patient. In these cases the membrana flaccida is usually considerably thickened, and the handle of the malleus is retracted against the inner wall of the drum-head, or perhaps partially or entirely lost from caries. In the majority of cases the stapes is detached from the long process of the incus. In these cases no harm can be done by excision of the ossicles, and much benefit may be derived by the operation. The first procedure, then, consists in detaching the portion of membrana flaccida which remains from that portion of the tympanic ring formed by the margin of the auditory plate. This is done with a knife, which is so placed on the handle that it may be passed around close to the auditory plate with ease. Passing the knife further back, the chorda tympani may be detached on each side. Where the tensor tympani muscle remains it may be readily divided. Although this step of the operation is simple, it is liable to be accompanied with considerable hemorrhage. Where there are many granulations in the tympanum, it is well to postpone the operation until they have been removed to some extent by treatment. With a special instrument the malleus is removed by passing the instrument from behind over the ossicles, and they are drawn downward, seized with a forceps and detached. The attic is then scraped and all carious bone removed. It will be found that mucous membrane remains on the inner side of the attic. This should be removed with a scraper of another kind, which is a modified form of that often used by dermatologists. Care is to be taken not to injure the oval or round windows while scraping. In these cases the stapes is rarely found present, except so far as its base is concerned. No applications are made, simply keeping the parts clean. In one or two weeks the parts begin to clean up, and usually before three weeks have elapsed, the part is completely covered with a sort of dermoid dry membrane. Where any diseased bone or polypoid tissue remains, as sometimes occurs in the antrum, it must, of course, be removed. The hemorrhage is at times troublesome, but it is never of a serious nature, and is easily arrested by cotton tampons or hot water. There is more or less disturbance of taste from injury of the chorda tympani nerve, but it disappears in a few weeks.

Chemical Test for Morphine.—Put a few drops of tincture of iron in the suspected liquid. If morphine is present a blue color will be produced.

HOSPITAL REPORTS.

By Dr. H. I. Ostrom.
42 W. 48 St., New York.

Complete Amputation of the Male Genitals for Recurrent Epithelioma (Stanley Hospital, Liverpool. Robert Jones).—The patient, a healthy man, aged twenty-nine years, denied a syphilitic history. The present disease began with hardness of the glans penis, which gradually developed superficial ulceration attended with little pain. The inguinal glands were enlarged. The penis was amputated in front of the pubes. Epithelioma returned in the stump seven months after the primary operation. Mr. Jones then determined to remove the entire genitals. An incision was made through the raphé of the scrotum, exposing the corpus spongiosum, which was then dissected from the corpus cavernosa. The cavernous bodies were followed to their origin and separated from the pubic arch. The corpus spongiosum was divided, its posterior part being left long enough to reach the skin wound; its anterior part was included in the cavernous mass. The testicles, first the left, then the right gland, together with the greater part of the scrotum, were removed. The edges of the scrotal flap, which formed an apron, were stitched to the surrounding structures, and the urethra made secure to the central opening. An india rubber catheter was retained in position. In seven weeks the man was able to return to his work. Six months after the operation there had been no return of the epithelioma.

Spontaneous Fracture of Stone in the Bladder (City Hospital, Boston. F. S. Watson, M. D.).—The patient, aged eighty years, suffered from retention of urine, following exposure to wet and cold, ten days before applying to the hospital. Catheterization at that time relieved him. At a second attack of retention much difficulty was experienced in entering the bladder, and a false passage was made in the prostatic urethra. In this condition he came into the hospital. A silver catheter was passed and allowed to remain in the bladder, through which a large quantity of bloody alkaline urine was drawn off. Urinary fever developed, and he died one week after admission. At the autopsy the bladder was found thickened, and the prostate hypertrophied. Behind the third lobe, in a deep *bas fond* lay fifty-six fragments of a uric acid stone, which together weighed one hundred and sixty grains. There was no evidence of a sufficient external force to have broken the stone, and the characteristics of the pieces suggested that an originally large mass had been separated by spontaneous fracture.

Compound Depressed Fracture of the Skull. Trephining. Recovery (Tottenham Hospital. Dr. E. Hooper May).—A boy, aged seven years, received a kick from a horse, on the frontal bone. Upon admission to the hospital a wound was found on the right side of the middle line, which extended out and down immediately above the supra orbital ridge for a distance of two inches. Both tables of the skull were driven below the level of the inner table. There was no escape of brain substance, no squint, no paralysis and no pain. There was considerable hemorrhage, and quite frequent vomiting. The child was at times drowsy and stupid. The skull was trephined and both fragments removed. The edges of the wound were united by carbolized silk, a drainage tube inserted, and a dressing of perchloride gauze and salicylic wool applied. In about six weeks the wound had healed and the child was dismissed. At the time of leaving the hospital his mental condition was normal.

Three Cases of Strangulated Hernia, Operation and Excision of the Sac (Guy's Hospital. Mr. R. Clement Lucas). I. *Strangulated in Infant, Undescended Testicle, Excision of Sac and Testicle.*—An infant, one year old, was brought to the hospital with strangulated hernia. The protrusion was first observed at three months of age. The present condition occurred during a severe fit of crying. Upon admission taxis was employed but proved ineffectual. The tumor was cut down upon, and the constriction found at the internal ring, which was incised. The sac containing the testicle was separated, transfixed and tied with a double cat-gut ligature, after which it was excised. The margins of the canal were sewn up with three chromic cat-gut ligatures, going deeply in the posterior wall. The skin incision was suturated with iron. The wound healed, a truss was applied, and the child went out of the hospital on the fourteenth day. II. *Strangulated Femoral Hernia, Excision of the Sac, Suture of the Canal.*—A female, aged forty-six years, applied, with a strangulated left femoral hernia. The protrusion had existed fifteen months, but until the previous evening was easily reducible. The tumor, which was as large as a pigeon egg, was very tense, and neither the application of ice, nor taxis, effected its reduction. A vertical incision over the protrusion showed the saphenous opening to be free, and that the constriction was situated at Gimbernats ligament. The bowel was a dark purple. The constriction was divided, the bowel returned, the sac separated and transfixed with a double cat-gut ligature, and excised. The canal was sewed with chromic cat-gut, and the skin incision with wire. Fourteen days after the wound had healed and the patient was discharged. III. *Strangulated Femoral Hernia in Male.*—The hernia in this case had existed four years. The treatment was similar to that in the proceding cases, and the results the same. Mr. Lucas is inclined to attribute the excellent results that he has obtained, to his method of excising the sac and completely closing the canal with chromic ligatures.

Double Inguinal Hernia. Operation (St. Luke's Hospital, New York. George A. Peters, M. D.).—The patient, a male (age not given—H. I. O.), was admitted to the hospital with an easily reducible left inguinal hernia, which upon coughing or straining came down, producing a tumor that measured from three to six inches. This was first noticed twelve years before, as the result of lifting a heavy weight. The inguinal canal on the right side admitted two fingers. Coughing brought down a small bubonocele. An incision showed the right ring to be very patulous. The hernia was reduced by taxis, and the collapsed sac left in the wound. The sac was opened, and a knuckle of gut found adherent to its wall at a level with the ring. This was not separated. The opening in the sac was stitched to the pillars "through and through" with stout cat-gut, and the ring closed. The operation was embarrassed by restlessness and vomiting which forced down a large mass of intestine. This was guarded with sponges and towels, and a great portion of the sac now dissected out. Two bone drainage tubes were introduced, the wound closed with cat-gut and dressed with antiseptic dressing. The wound did not heal for six weeks, but at that time it had filled with granulations, and the patient was discharged cured.

Rupture of the Bladder. Recovery (Newcastle Infirmary. Dr. Armstrong).—A stout girl, aged sixteen years, fell forty feet upon a man who was passing at the time. Independent of extensive external injuries, the bladder was found to be ruptured, the rent involving the anterior vaginal wall for three-quarters of an inch. This was held together with silk-worm gut. The wound healed perfectly. This case is rather remarkable, as at the time of the accident, it was known that the bladder was empty. It is probable that the uterus, which was large and heavy, was forced down, and violently pressed the bladder against the perineum.

Disease of the Knee-joint Secondary to Synovial Cyst. Amputation (St. Bartholomew's Hospital. Mr. Thomas Smith).—A male, forty-five years of age, boot-maker, was admitted with swelling of the left knee. The present trouble began over a year before, with swelling of the synovial cyst of Baker, which was at first thought to be an abscess. This was opened in the calf of the leg, and one pint of clear synovial fluid evacuated. The wound healed by first intention, at which time there was no evidence of knee complication. Seven months after leaving the hospital the patient returned with continued pain in the knee, from which a back-splint was applied with relief. The amelioration was only temporary, and he applied again for admission. The knee was found much swollen and very tender, with sharp pains at night. There was neither heat nor redness. A large fluctuating swelling occupied the popliteal space. There was no lateral movement of the joint. Examination under ether did not assist in clearing the diagnosis. Amputation was performed above the knee-joint. The under surface of the patella was carious. The articular cartilages were ulcerated and almost gone. The condyles of the femur and head of the tibia were in the same condition. A large cyst existed at the back of the joint, which contained a quantity of bloody fluid, and communicated with bursa between the inner head of the gastrocnemius and semi-membranosus muscles, and so with the joint. The old cyst was shriveled up, and ran along the inner border of the gastrocnemius for one inch and a half, communicating by a very narrow passage with the one at the back of the knee. There was no pus in the joint cavity.

Sarcoma of the Internal Popliteal Nerve (Newcastle-on-Tyne Infirmary. Dr. G. H. Hume).—A man, aged forty years, a miner, was admitted with a well-defined swelling behind the right knee, from which shooting pains extended down the leg. The pain had been felt for months; the tumor only a few weeks. The pain at times involved the sole of the foot and base of the toes. The tumor was situated under the deep fascia, and was freely movable when the leg was flexed: only slightly so when extended. Pressure on the tumor caused an aggravation of the shooting pains. Upon removal, the growth was found to be soft, oval-shaped, extremely vascular and intimately connected with the internal popliteal nerve. The short saphenous nerve was stretched over it. The length of nerve removed with the neoplasm measured three inches and a half. The wound healed slowly but completely, and the man returned to his work with no ill effects from the operation. Dissection of the tumor showed it to be encapsuled in the sheath of the nerve. It was exceedingly vascular, and in places showed evidences of breaking down. The center of the growth was occupied by a large blood cavity. **Dr. Hume draws attention to the resemblance which in a** further stage of degeneration, might exist between this growth and a popliteal aneurysm.

Parotitis Following Ovariotomy (York County Hospital. W. H. Jallard).—A woman, aged twenty-one years, was admitted to the hospital with an abdominal enlargement, which was found to be caused by double non-adherent ovarian cystoma. Both tumors were removed without difficulty. On the fifth day following, the patient complained of stiffness of the neck with pain in the lower jaw. At this time there was a slight swelling and tenderness of the parotid gland. These conditions greatly increased. The left side then began to swell, and passed through the same stages that had been observed on the right side. In twelve days all swelling and pain had disappeared. At the time that this patient was attacked with parotitis there were no other cases in the hospital,

Periostitis Followed by Osteo-Myelitis. Exsection of the Tibia (Mt. Sinai Hospital. Dr. Wyeth).—A boy, aged twelve years, was admitted with periostitis of the tibia. Free incisions were made, and a quantity of pus evacuated. The temperature was not materially reduced. Under ether the bone was then more extensively exposed, its cavity scraped, and drainage maintained. General improvement followed this operation. About five weeks after the first operation the tibia was exsected from the upper to the lower epiphysis, Esmarch's bandage being applied. The periosteum was saved with the hope that bone would be reproduced.

Extirpation of a Ruptured Uterus (Guy's Hospital. Charity maternity department. E. Collingwood Andrews).—A woman, thirty-one years old, was confined with her fifth child. Labor had existed for twenty-four hours. The final pains were very strong and frequent, and culminated in exceedingly strong and prolonged uterine contractions. The presenting head made little progress. The patient became collapsed, and after an intense abdominal pain there was a total cessation of pain. She was nearly pulseless, greatly exhausted, pale, but conscious. She was delivered of a still-born female child, with the long forceps, without difficulty. A copious flow of blood followed the extraction of the child, but the uterus contracted well. The placenta not being expelled, the hand introduced into the uterus discovered a large rent in its walls, and by following the cord to its attachment, the placenta was found in the abdominal cavity and removed without difficulty. It was decided that the patient's only chance of recovery lay in immediate abdominal section. The uterus was lifted through an abdominal incision, the pedicle transfixed with a stout double silk ligature, the cervex clamped, and the uterus and appendages removed by cutting through the stump. There was very little hemorrhage, and at first there seemed a prospect that the operation would prove successful, but the woman sank, and died soon after the operation.

A Liver with Two Gall Ducts (Sir Patrick Dun's Hospital. Dr. Perser).—A girl, aged eleven years, died of malignant scarlatina. At the post mortem, besides the ordinary changes incident to the disease, two separate gall bladders were found, each of which had a distinct cystic duct that opened independently into the bile duct. The common hepatic duct, instead of dividing into two branches when entering the liver, divided into three ducts, one passing to the left, another to the right, and a third to the posterior part of the liver. **These ducts did not communicate with each other.**

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THE OLD AND THE NEW YEAR.

ONE OF THE old fables which has come down to us from an unknown antiquity, and which is full of wisdom, is that the gods in the beginning divided man into men that he might be more helpful to himself, as the hand was divided into fingers the better to answer its end. The idea is a grand and far-reaching one, and represents society as one man, with its faculties divided among an innumerable number of men, which go to make the whole man. One faculty is directed to mechanics, another to agriculture, and another, perhaps, to art. Each contributes its quota to the general good, and all are necessary to complete the whole man. The thinker studies closely the phenomena of nature, evolving therefrom new principles which the workers put to the test of experience, deducing from actual observation their belief or disbelief of the truth or falsity of the premises in the whole or in part. In this way only can any principle be established or any truth freed from its surroundings of error and crystallized into a distinct form to be utilized in the great work of life. It is not the man who follows blindly the so-called great thinkers of the world, repeating, parrot-like, what he is taught and never seeking to establish for himself, in his daily work, the truth or falsity of statements made, who will stand out in the future as the benefactor of mankind, but rather he who subjects these statements to the test of experience and close observation; who seeks to study for himself the problem of life, and realizes the fact that its laws are concealed under the details of daily action. He must not only work with men in books, but go into the houses and the daily lives of those around him, and from their needs, their appetites and talents and affections catch the key-note of truths which open the doors of the inner sanctuary of life and reveal its before-hidden mysteries.

With each new insight into the harmony of nature, with each step forward in progress, while we may be sweeping away old delusions and planting our feet upon the graves of old theories, we learn that modesty and humility which come from the fallibility of human thought; and, while we do not dogmatize ourselves, we refuse to accept the dogmatism of others. We may be content with a little light so that it be our own, but we will not renounce the right to traverse for ourselves the star-lit worlds of truth and seek to unfold their mysteries at the dictation of any intellect, however powerful. That man is false to his trust and fails to perform his duty to the humanity of life, which constitutes *the man* of mythology, who does not, in some small degree, it may be, seek to penetrate beneath the crust, and think and act from the reasoning of his own brain and the impulse of his own soul. By the very nature of his birthright, by the elementary constitution of his being as a part of nature which embosoms us all, which sleeps no moment in an old past, but every hour repairs herself, yielding us every morning and with every pulsation a new life, man is a reformer, a remaker of what man has made, eliminating the false, and not only placing in a brighter light and stronger setting the good and the true, but adding to its beauty and use by clearing away the *debris* by which it may be surrounded.

The work of the operative surgeon is to a certain extent mathematical and mechanical. When the disease is before him, mathematical calculation and mechanical skill enable him to remove it; but neither his mathematics or mechanics make clear the cause, so that it can be avoided in another. It is comparatively easy to remove diseased growths, but it requires a more profound and careful study to get at and remedy the

causes which produce them. And yet surgery is something tangible, whose results cannot be questioned; while medical philosophy, reasoning from cause to effect—groping along, it may be, by a dim light, or in the dark—simply by a process of reasoning, is constantly obliged to retrace its steps, and give up what was supposed to be well assured positions, but which additional light have proved to be untenable. It has been well said:

"Falsehoods which we spurn to-day
Were the truths of long ago;
Let the dead boughs fall away,
Fresher shall the living grow."

At the close of the year, as we close up the business of the past and open a fresh account with those who demand our services in the future, it is natural for us to turn our thoughts backward and review the acts and motives, the successes and failures, of the year. In these twelve months has there been no stain upon our manhood, none upon our professional honor? Have we in each and every case done our whole duty honestly and fearlessly, exacting only the remuneration for our services justly our due, without any attempt to unduly exalt our own work and magnify our skill more than the occasion requires? Has our professional conduct in all cases been stainless and free from guile? Has our public work been such as become good citizens, with the public good always at heart? Has there been no case where by a word or a look, a charge unjustly made and carelessly repeated, an opinion uttered without sufficient scrutiny as to the facts; injury may have resulted to others which a more careful and honest procedure on our part would have prevented? It is natural for us to be mindful of our individual interests; but he best serves himself and builds up his own fortunes who best serves the public, bringing to his work careful study, intelligence and a ripened judgment, combined with that professional honesty and integrity which at least wins the esteem and the respect of all.

Difference of opinion upon the great questions of the day there must be, but that need not prevent their discussion in a fair, honorable and gentlemanly manner. In this way only can the real merits of a question be made clear. Abuse and misrepresentation are the arguments of the coward, and all his bluster and wordy declamation is only a proof of his ignorance of the subject he attempts to discuss, or that he has no argument to maintain his position. It is wise to leave such men severely alone.

But above all, in the review of the past comes up the question, What have I done individually to make the world better? What thoughts have I dropped here and there which, like scattered seed, may yet ripen in a harvest of good, lifting up the fallen and giving new strength to some weary soul in its higher aspirations? And so as we start upon the new year we bespeak for each and all a more earnest zeal for truth and a stronger resolution to make our lives such that when the year closes it will leave no sad memories of duties unperformed, or of friendships estranged through any act of ours. And thus thinking and feeling, THE NEW YORK MEDICAL TIMES, "with malice toward none, with charity to all," extends to its patrons everywhere the cordial greetings of the New Year.

THE GOOD SAMARITAN DIAKONISSEN.

HOSPITALS, asylums and dispensaries are among the necessities of a great city, and no city in the world has them in greater variety than New York. The doors of dispensaries are always open to the poor, where medicine and medical advice can be obtained without money. Hospitals devoted not only to general, but to special diseases, with the ablest specialists in the city on the medical staff, are located in different parts of the city. Here those who have means can be furnished with the most careful nursing and the best skill in the profession; while the deserving poor, at a trifling expense, often defrayed by churches and individuals, can enjoy the same advantages. The utterly destitute, often without friends or home, are provided for in the great charity hospitals of the city. And yet, with all those great institutions, there is an amount of suffering and destitution, sickness and death among the poor, in this city of wealth and culture and busy industry, truly apalling. One great reason is, ignorance of the plainest and simplest laws of health—an ignorance which is often

found in the over-heated houses of the rich as well as in the dark, cold and damp tenements of the poor. The medicine freely dispensed at the great charities are of but little use when the air of their home is filled with the seeds of death, and the food with which they seek to nourish their half-starved bodies, often rendered almost worthless by lack of skill in preparation. Hospitals and dispensaries, with their splendid array of medical skill, only give temporary relief, because they simply meet present conditions. One-half the money spent in preventing these conditions, which is now poured out so lavishly but often unwisely in the sacred name of charity, would diminish a death-rate which now reaches fearful proportions, reduce crime, prevent much of that sickness arising from defective nourishment and poisoned air, and give us stronger, healthier and better lives.

The Board of Health has done much during the past twenty years for the health and comfort of the city. Its powers are in certain things almost absolute, and they have been exercised with a wisdom and energy which have given excellent results. Houses recently constructed have been built with some regard to ventilation and correct sanitary laws. Training schools for nurses have been established within the past twenty years in connection with our large hospitals. Nursing has grown into a profession, second only in importance in the care of the sick to our own. But skilled nursing, such as is to be had from graduates of training schools, is beyond the means of the poor or even those in very moderate circumstances.

The Board of Health is doing its part in supervising the construction of buildings and enforcing certain sanitary regulations, rendering it possible for the poor to have fresh air and cleanliness if they are disposed. They have been so accustomed to filth, to bare walls and stifling air, to half-cooked food and an absence of comfort, that it has become a part of their nature. Let them once learn the comforts of a well-regulated home and it would not be long before they would fully appreciate them. This instruction the Board of Health does not give, the hospitals and dispensaries do not furnish, and the physician has, in his occasional visits, neither the time or often the knowledge to instruct. And just here the organization mentioned at the head of this article, new in this country but old, thoroughly tried and crowned with success in Germany, steps in and touches with a healing hand the very root of the evil by showing how much better is cleanliness and pure air and well-cooked food and a well-regulated home to filth and discord and confusion.

The order was originally established in Germany, and during the Franco-Prussian war, by its watchful care and tenderness, did much to soften and soothe the sufferings of the sick and wounded. Its members go among the rich and poor, wherever intelligent and skilled nursing is needed—among the rich receiving compensation, but among the poor rendering the necessary aid without remuneration.

An effort is now being made to establish a similar order in this city, adapting it especially to meet the wants of this community. It includes a hospital which will be utilized in the training of nurses who will be connected with the order, receiving only a small money compensation, but cared for by the institution in sickness and furnished a home when incapacitated for work. These nurses, thoroughly trained, can be employed by the rich, the compensation going into the funds of the institution, or sent out without pay to the sick poor, going from one tenement to another, as needed, introducing order and cleanliness, and showing how to prepare food and how to care for the sick. They give that instruction and care so much needed in changing habits formed through long years of poverty, and bringing out by example and teaching the nobler and better qualities of their nature.

The trustees of the Western Dispensary have furnished the order, in the commencement of its work, the upper portion of its building, 201 West 38th street, which has been fitted up as a small hospital, with private rooms for pay patients, and wards for free beds. The hospital was opened on the 14th of December by an important and successful operation on a lady from a Western city by Dr. H. I. Ostrom. The order is new in this country, and the first year it will be an experi-

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ment; but the needs of such an institution are so manifest, and the channels through which it might work so numerous, that it is hoped and believed by its promoters that it will take deep root and grow into vast proportions.

"THE DOCTOR OF THE FUTURE."

UNDER THIS caption the Editor of *The Alienist and Neurologist* quotes approvingly a part of our article in THE TIMES for July, 1886, on the unity of medical science and the inutility of longer maintaining Sectarian Schools of medicine, characterizing it an "editorial of true scientific spirit." We concluded that article in the following words:

"In the nature of things there can be but one system of medicine recognized by science. Either homœopathy must absorb the Old School or be absorbed by it."

This view of the question is heartily endorsed by the editor of *The Alienist and Neurologist*. He says:

"We transcribe to endorse this sentiment. There can, in the nature of things, eventually be but one broad, catholic practice of medicine, embracing every known remedial resource which experience proves and has proven to be of real value.

"It matters not how men start out in the practice of the medical art, whether upon broad or narrow lines. As they grow older in observation and experience they try to practice their art the best they can, if they be honestly and earnestly devoted to the welfare of their patients. The sects diverge much from regular medicine, but the better and wiser of sectarian practitioners grow into liberal and broad-minded physicians as they grow older in practice. A wide observation and a large clinical experience ripen judgment and must obliterate all narrow, sectarian boundaries that circumscribe the utility of the true physician at the bedside, even though all may not be willing to break down the barriers of environment. True science, in its ever onward march, may be trusted to break down and cast away all barriers that lie in the pathway of truth and real progress, and somehow or other, we know that sects in medicine must die, and only truth survive as a part of medical science. New sects may be distinctive, but as they grow older and broader whatever of truth they have to bestow upon medical science will, if freely given, be freely received and absorbed by it (the profession), and finally come to be but a part of that great salvage corps whose mission is the highest physical and not the lowest moral welfare of man."

It gives us pleasure to give place to these words of our esteemed collaborator, Dr. C. H. Hughes, and valued contemporary, *The Alienist and Neurologist*. All the more so by reason of the hostile attitude toward us taken by many prominent and esteemed members of the school with which we are identified. However unpleasant ill-natured criticism of ourselves and the position of THE TIMES may be to us, we are not dismayed by it, but feel assured that the stand which we have taken in behalf of scientific medicine will be justified in due time by the march of medical events and the growth of the rational spirit. "The Doctor of the Future" will surely recognize no sect in medicine.

NEUROTIC ORIGIN OF DISEASE.

THE CAREFUL investigation of the pathologist is yearly adding to the number of diseases which can be distinctly traced to a neurotic origin, rendering in many instances diseases amenable to treatment which were formerly considered more or less hopeless. Diabetes was at one time considered to be a disease of the kidney, and at a later period as having its origin in the liver; but the famous discovery of Claude Bernard, that where certain injuries are inflicted on the floor of the fourth ventricle of the brain glycosuria inevitably follows, did much to locate the seat of the disease and direct attention to the organ to be studied in its treatment. Frerichs demonstrated that disease of the liver alone produces no glycosuria when the diet contains a large amount of sugar, and although no one has yet been able to determine the precise nature of the development of and progress of diabetes, we are one step nearer the solution of the problem in ascertaining the primary seat of the trouble.

We occasionally meet with cases of severe salivation during pregnancy. In some cases the salivation commences almost at the beginning of pregnancy, and may continue for months, the saliva secreting in an abundance equalling the

most severe forms of mercurialization. The prompt relief usually following the use of the bromide of potash or of soda, both internally and as a lotion, points directly to a neurotic origin, this drug exercising a direct influence on the salivary nerves, and on the origin of the facial nerve in the medulla oblongata, and also on the secreting filaments of the sympathetic. The pruritis of pregnancy, so obstinate and irritating as not unfrequently to bring on miscarriage, can best be relieved by remedies which act directly upon some portion of the nervous system.

Severe forms of erythema and eczema, more especially in the aged, may depend in a great measure upon the condition of the periphery of the nerves, in which case the bromides and belladonna will be likely to prove beneficial. We might go on enumerating one disease after another for which a clue to the treatment may be found in their neurotic origin. With a better understanding of the function of each organ of the brain in the phenomena of physical life and mental strength and activity comes a better insight into the origin of many of those maladies which have heretofore been little understood. With this insight into the cause and nature of disease we can study more intelligently the effect of drugs upon different portions of the system, and the adaptation of foods to best meet the wants of the body.

The future triumphs in medicine we believe will be found more in a proper use of food and the observation of a few plain, simple rules of exercise, with an understanding of the nature and use of a very few drugs, than in crowding our materia medica with every mineral found upon the earth, and every plant or tree springing from its soil.

FOOD AND DIGESTION.

A BRIEF but pithy essay by Dr. E. P. Morrow, in the *Cleveland Medical Gazette* for June, 1886, contains some valuable suggestions which, as he remarks, if not altogether in agreement with the dogmatic teachings of the day, at least do not conflict with any established facts. The study of life and health, as dependent upon the observance of law, the writer regards as incumbent upon every medical practitioner. There is no question among thinking men that the time is at hand when it will be the physician's duty to prevent disease by advice founded on the principles of physiology and hygiene, instead of attempting only to cure what is too often beyond his influence. By investigating the laws of dietetics and digestion, it will be found that here we have a prolific cause of chronic organic disease.

According to the teachings of physiology, digestion is essentially a process of fermentation—that is, we have in the mouth, in the stomach, and in the abdominal tract, special organs or glands, the function of which is to furnish active ferments, by whose operation the crude constituents of the food are changed into material capable of passing through animal membrane by osmosis, as well as to fit them, later on, for conversion into blood. Each ferment performs a separate office. Ptyalin of the saliva begins the conversion of starch into glucose; pepsin converts proteids or nitrogenous foods into peptones; pancreatin and diastase complete starch conversion, while trypsin and bile emulsify fats. These important ferments, and our knowledge of what they will do, inform us what foods the physiological man can digest. Speaking generally, such foods consist of nitrogenous organic principles (albumen, fibrin, musculin, &c., belonging to the animal kingdom; gluten, legumin, &c., belonging to the vegetable kingdom), organic non-nitrogenous principles (sugar, starch and fats), and a few inorganic principles (water, salt, phosphate of lime and iron, the latter, all but the water, being questioned by some observers). Every student of physiology becomes acquainted with the comparative quantities of these foods required in health.

The methods by which this knowledge is arrived at are too numerous for detailed description, but in general terms it depends upon ascertaining the amount of waste due to exercise and nutrition. Comparative examinations of the lower animals aid in this matter. We know what great quantities of lowly organized food the herbivorous animals must eat, how elaborate are their organs of digestion, how long a time it takes to raise their food to animal tissue. The cow, grazing all day, digesting with four stomachs and many yards of intestinal canal, chews her cud all night

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in order that she may convert the grass into suitable material for the higher act of tissue-formation. On the other hand, the carnivora, who must live by hunting their food, have no time to waste in digesting it; the quantity taken is less, because it is more highly organized. The apparatus for digesting it is simpler, because it is simpler to digest—in other words, it is easier for them to convert flesh into flesh again than for the cow to convert grass into tissue. What now do we find comparatively in man, who is omnivorous? We find that he more nearly resembles the carnivora in organic structure, yet also has the organs for a limited elaboration of the lower foods. Man in his habits, too, is like the flesh eaters in that his meals are at long intervals, and that under most circumstances of life he has not time to do nothing but digest. The conclusion to be drawn here is, that for conservation of force and economy of tissue, meat should form the greater part of man's food, because it is more easily digested and more readily converted into blood and energy. There is another reason, however, why the lower order of foods should be sparingly used in health, and largely if not wholly avoided in disease. Undoubtedly, both classes of food are demanded and assimilated by man in his full vigor, but unfortunately all individuals are not in full vigor, all are not physiological. If the normal digestion is dependent upon energy and force for the supply of the normal ferments, what condition arises when energy and force are lacking? The answer is—pathological fermentation. It is easy to see that if there be any defect in the quantity or quality of these wonderful ferments, whose almost magical power converts the crude elements of food into material for higher work, there will remain a mass of material to undergo other changes.

By the microscope it has been clearly shown that man ingests with his food the spores and germs of all the fermentative processes, and that the power of physiological digestion is such as to convert these germs together with the food, thus protecting the individual; but when the physiological digestion is impaired, the germs, finding the conditions adapted to their existence, attack the undigested material and convert it into substances which can pass through animal membrane, but which are in no way suitable to be transformed into blood. The rational treatment under these circumstances, is to exclude from the dietary those foods which most easily undergo pathological fermentation. It is a well-known fact that the non-nitrogenous elements are the very elements attacked by ferments; for this reason foods containing starch and sugar are sealed for keeping. It is an every-day experience in summer to witness the fermentation of starch and sugar foods if they are moist and the heat is sufficient. These non-nitrogenous foods, then, are those which should be forbidden when the digestion is impaired, for if not eliminated from the diet, they must be eliminated later by the organism. As already shown, we have in the alimentary tract the conditions, namely, heat and moisture, which favor fermentation, either physiological or pathological. Let us now consider what results may arise from the presence and absorption of pathologically fermented material. It is a fact that if this improperly prepared material enters the circulation, it constitutes an element foreign to the blood, and must be eliminated by the organs whose office it is to protect the system by getting rid of foreign material. Not one only, but all of the eliminating organs participate in this process. The lungs, the kidneys. the liver, the intestinal glands, the mucous membrane and the skin, all combine to rid the system of the unwelcome intruder. Day after day, month after month, year after year, these organs keep at their work. The greater the demand the harder they labor. The more they are exercised the stronger they grow, until, in accordance with a law of nature, they reach the limit of their power; then take place decadence and failure. At first these are but functional; still the material is poured upon them; they cannot respond to the consequent demand; at length the irritation which spurred them to their work acts upon the structural tissue until the organ gives way, and we have the gross lesion which we say is due to inflammation.

It is here shown how kindly nature protects the individual; how persistently she throws out safeguard after safeguard, fighting and struggling

as long as there is power to fight and struggle. We see that there is a natural history of disease, that what we call abnormal is in reality, paradoxical as it may seem, a normal condition; that chronic as well as acute diseases are conservative processes so long as the conservative power lasts. We find that the intestinal canal is protected by the thickening of its walls, making absorption less easy. We find that nature protects the organs by increasing and strengthening the working and interstitial tissues—yet we call this abnormal. In the final failure, when the post-mortem examination reveals the particular organ which was the first to break down, we give it the name of some disease, and say it was inflammatory. True, it was inflammatory; but to what was the inflammation due? Inflammation follows only upon exhaustion or direct injury. Here, we have shown, are both of these conditions.

Every thinking and well-informed man will say that it is the daily, the hourly, abuse—through which hundreds will live where one dies—that does the most damage in the way just described, that furnishes the predisposing cause upon which the exciting cause may act, be this exciting cause cold, a single overexertion or a single excess. This being granted, where do we observe a more constant and more unheeded disobedience of nature's laws than at the table? The principal cause of this is ignorance—ignorance of why we eat, and not of foods; for if people would but obey the demands of their healthy bodies, instead of trying to tickle their palates, they would naturally be led to the proper kinds of food without any scientific knowledge on the subject.

Dr. Abercrombie is said to have once declared that "on the table might be found the cause and cure of every disease," and very probably Dr. Abercrombie was more than half right. It is plain, at all events, that the present tendency is to go further than the gross and microscopic appearances of organs in order to determine the causes of disease, and further than the mere administration of drugs in order to relieve them.

Poisoning by Phosphorous—Is said to be relieved by turpentine. The two drugs combine and are eliminated without causing any serious trouble. Of course the turpentine should be administered at the outset.

ABDOMINAL SURGERY IN AMERICA.

THE DISCREPANCY between the results obtained in abdominal surgery by European surgeons, and the results obtained in the same class of cases by American operators, is suggestive of reflection, and renders it incumbent upon us to if possible ascertain its cause. In this branch of surgery statistics favor our foreign confréres. We are loath to believe, nor is there reason for doing so, that this can be attributed to lack of skill, or to a deficiency among us of that nicety of perception and breadth of culture that are inseparable from the true surgeon. In scientific attainment and knowledge of their art, in boldness of conception and ability to practically demonstrate the truth of what the brain has planned, American surgeons occupy an honorable position among the surgeons of the world. In other departments of operative surgery, save the one we are considering, we have reason to feel proud of our success. It is no longer necessary for our students to visit Europe to witness great operations, or see great operators—both of these are found at home. The lamentable fact, however, remains, that as a profession, our abdominal surgery, judged by the standard that Europe has furnished, does not make a good showing. Perfection in any matter that calls for manipulative skill, can only be acquired by practice; and it is undeniably true, that in no department of surgery is the novice at a greater disadvantage than in the operative surgery of the abdomen. How, therefore, can our surgeons obtain the clinical experience—for here, we believe, lies the secret of their success or non-success—that will enable them to compete successfully with European laparotomists. Without considering actual figures, we are probably safe in assuming that the material in this country is quite as abundant, if not more so, as that furnished by an equal number of persons in any other country, or countries. And it is also probably true that a proportional number of patients apply for treatment. The difference lies, not in the larger clientage that exists in Europe, but in the fact that this same number of patients come under the treatment of a smaller number of operators.

We are tending to special studies, and to specialists; for the wise recognize that the working years of life are too few to accomplish more than one thing well. European surgeons confine themselves much more than we do to special branches of operating, and hence we believe, are able to obtain the phenominal results that are the marvel and envy of the world. Among our surgeons every one seeks to add to the brilliancy of his reputation by making as many abdominal sections as possible. This is dishonest, to the extent that no surgeon should perform an operation that he thinks another is qualified to perform better; but the blindness of the policy reaches its climax in the publication of series of perfectly uncomplicated cases, the mortality of which should bring a blush of shame upon the cheek of the operator, and unless put forth as advertisements, would remain buried in the case-book to be used as studies upon which to base future improvements. There is too much advertising done under the plea of benefiting the profession; there is too much gratuitous circulation of medical literature in the form of remarkable cases and series of cases. If these have any value, of course the profession is entitled to them, and they should find their way into our journals, and legitimately be brought before the profession; but we think it is time to deprecate the practice of publishing operations that are recognized surgical procedures, that contain nothing new, that are of no value save as appearing under the name of the operator, and above all, that as matters of statistics, reflect discredit upon the profession at large. There is another cause for the high mortality that American laparotomists are obliged to acknowledge—a cause that follows naturally from the one already mentioned. With a larger number to select from, each surgeon, even though he may be actuated by a desire to increase his number of laparotomies, will be less inclined to operate on doubtful cases, and will thus have his judgment less biased. It is to be feared that many of our surgeons do not with sufficient care discriminate between the cases that should be operated upon and those that cannot be benefited by an operation, and they thus swell their mortality tables. What we want in surgery, as in every other walk of life, is honest work, honestly done and with an honest purpose. The reputation and the statistics will then require no special attention, and will thus become a fair index of each man's work and worth.

WOMEN AS PHYSICIANS.

THE *American Lancet*, in an editorial touching upon women graduates from colleges, presents the somewhat astonishing fact, from replies received from 705 women, that only 169 were free from uterine disease and that only 27 per cent. were married after leaving college. The editor adds by way of an explanation that "from their trained reflective powers they are prevented from falling victims to sudden impulse, but subject themselves in all acts to cool reflection.

"Farther, modern life calls for late marriages, so that there is still hope that many more will be married before they reach the age of sixty. Farther, the committee say that college women are not as prone to enter upon married life as the majority of women."

The editor makes the following quotation from a keen philosopher: "The truth is that out of the many elements uniting in varied proportion to produce in man's breast that complex emotion we call love, the strongest are those produced by physical attractions; the next in strength are those produced by moral attractions; and even these are less dependent upon acquired knowledge than on natural faculty, quickness, wit, insight. If any think the assertion a derogatory one, and inveigh against the masculine character for being thus swayed, we reply that they know little of what they say when they thus call in question the divine ordinances."

INSANITY AND CRIME.

THAT the criminal is mentally unsound, says the London *Lancet*, may be as hazardous a doctrine as jurists are apt to call it, but it is one of which the French alienists have been most strenuous vindicators—in proportion, too, as their practice has favored their cognizance of crime. Of these the ablest was certainly the late Dr. Legrand du Saulle. He was already an accomplished physician, especially in mental disease,

when he became *medecin en chef du depot*—that parade-ground, so to speak, on which every morning the criminals of Paris are passed in review. Knowing exactly with what offence they were charged, and familiar enough with the law to appreciate the magistrate's view of their several cases, he never hesitated to apply to them the sifting process of which only the alienist is master. Hysteria in its protean forms, hallucination, mania in all its phases—he knew them not only in their mental and physical signs but in their characteristic acts; and the wretched creature whom a rough-and-ready police system would have relegated to prison, he would see occasion to put *en observation*, with the result of showing that the offence with which he was charged was as non-voluntary as if done in a dream, and that with the removal of the deranging cause a worthy life might be restored to itself and to society. As one by one the arrested of the previous night were brought before him, his keen scrutiny, aided by a centripetal question, would separate the calculating criminal from the unconscious one, and he would consign them to their several destinations accordingly. "What took you to the place, vendome, barefooted and bareheaded?" he would ask of a scared-looking female with the makings in her of a madge wildfire. It is a case of *mania errabunda*, he would remark *sotto voce* to a professional bystander, and the poor nightwalker is saved from the prison and put *en observation*—to thank, four years after, Dr. Legrand du Saulle himself, who recognizes in her an honest *bourgeoise*, married and mother of a family. His experience was rich in such surprises, as indeed is not to be wondered at when the average number of so-called criminal cases that passed under his scrutiny was 2,500 a year. During the terrible weeks of the Commune, when every wayward impulse which a disorganized society could prompt enjoyed congenial opportunity, his work was aggravated and multiplied to an extent which put his resources of mind and body to the severest trial; but he survived it all, to earn the gratitude of many a saved life and of many a career unmarred. He wrote much, but though far from averse to the refinements of classification, which seems so unreal to the "plain-man view," he was very careful to lay down no rules for the guidance of other physicians in circumstances similar to his own. Indeed, it is doubtful whether he could have succeeded in such a task if he had tried, for his power of diagnosis was as distinctly a gift as that of the born poet or the artist. He lived and worked however, to secure this advantage for his profession—a far more respectful hearing in courts of law than had previously been accorded to the "medical witness."

TOILERS AMONG THE DEAD.

AT A RECENT meeting of the Academy of Medicine M. Brouardel made known some curious and interesting facts concerning the dead body of a girl, aged twenty-two, which was discovered in a cellar under a heap of straw. The body had lain there about a year, and was in a perfect state of mummification. One of the limbs was shown at the meeting. It was thoroughly dessicated; the tissues were hardened and gave a sound when struck. MM. Brouardel and Andouard attribute this mummification to the dryness of the soil on which the dead body had been placed; but the most important factors were five different species of acarina which deposited the *debris* of the envelopes of their eggs and carapace among the dust that covered the dried tissues of the body. M. Mégnin has proved that by studying the generations of acarina which have been at work on a dead body the date of death can be ascertained. This entomologist, by examining the *debris* of acarina in a child's corpse, ascertained that death occurred two years previously, and a judicial inquiry confirmed this statement. M. Brouardel described the order of succession of the different species of acarina which worked on the dead body of the young girl; also the work of destruction accomplished by each separate species; the gentles (larvæ of flies), *dermestes, sarcophagus, laticrus and lucina cadaverina*. One species absorbs the fluids, another consumes the fatty acids. When a species has finished its work it dies on the dead body, or is devoured by a succeeding species. Each generation in summer time lives from six weeks to two months. In a recent case of murder M. Mégnin established with pre-

cision the exact date of the burial of the human remains discovered in the garden. Among the remains a particular kind of ant was observed which is never found in soil recently disturbed; also the *debris* of acarina, known as *esophagus echinococcus*, which also furnished a chronological indication. Portions of a bulb of a lily furnished further proof. Two years must have elapsed in order that the bulb should undergo the alterations it presented. M. Brouardel dwelt on the value of these entomological data in reference to medical jurisprudence.

BIBLIOGRAPHICAL.

DISEASES OF THE LUNGS AND PLEURÆ, INCLUDING CONSUMPTION. By R. Douglas Powell, M. D., London, Fellow of the Royal College of Physicians; Physician to the Middlesex Hospital and to the Hospital for Consumption and Diseases of the Chest at Brompton; late Assistant Physician and Lecturer on Materia Medica at the Charing Cross Hospital. Third edition, rewritten and enlarged, with illustrations, including two lithographic plates; being Vol. XI. of Wood's Library for 1886 (12 vols. in set, price, $15.00). New York, William Wood & Company.

The present volume is an amplified edition of the work on consumption and certain diseases of the lungs by the same author, published in 1878. The work closes with a carefully prepared chapter on the treatment of consumption.

DISEASES OF THE BLOOD AND NUTRITION, AND INFECTIOUS DISEASES; being Vol. IV. of "A Handbook of Practical Medicine," by Dr. Hermann Eichhorst, and Vol. XII. of Wood's Library for 1886 (completing the set; price of set, $15.00). Illustrated. New York, William Wood & Company.

The library for 1886 closes with the fourth volume of Dr. Eichhorst's valuable "Handbook of Practical Medicine." The third volume, which was devoted to nervous diseases, includes many subjects not usually treated in works of this kind, but of great practical value to the physician. It is one of the best treatises on diseases of the nervous system for practical work we have seen. The fourth and last volume is full of practical information upon subjects which are only within the past few years just beginning to be understood. The four volumes are among the best contributions to medical literature.

MANUAL OF OPERATIVE SURGERY. By Joseph D. Bryant, M. D., Professor of Anatomy and Clinical Surgery and Associate Professor of Orthopedic Surgery, Bellevue Hospital Medical College; Visiting Surgeon to Bellevue Hospital; Consulting Surgeon to the Bureau of Medical and Surgical Relief of Bellevue Hospital; Consulting Surgeon to the New York Lunatic Asylum and to the Northwestern Dispensary. With about eight hundred illustrations. New York, D. Appleton & Company, 1877; pp. 530. 8vo.

This volume is the result of requests which doubtless every professor receives sooner or later from his admiring students "to make a book."

If all should follow this incentive—and many have—we should have text-books of this class in great variety; but fortunately we can depend upon the "survival of the fittest." The author of this work seems to know how in the briefest space to give the student of surgery the aid necessary "to acquire established facts," and this is an important point in a book of this kind.

The text is most fully illustrated, and brings the subject to date, and it will be found useful in the sphere to which it belongs.

TRANSACTIONS OF THE THIRTY-NINTH SESSION OF THE AMERICAN INSTITUTE OF HOMŒOPATHY; forty-third anniversary. Held at Saratoga Springs, N. Y., June 28, 29, 30, and July 1, 2, 1886. Edited by the General Secretary, J. C. Burgher, M. D.

The members of the institute ought to congratulate themselves that they have so efficient a secretary, and one who furnishes them with their transactions in such good shape and so promptly. The volume contains 938 pages, and contains much valuable information.

THE AGE OF ELECTRICITY. By Park Benjamin. 1. Vol., 12mo., $2.00. Charles Scribners' Sons, publishers. New York, 1886.

The wonderful and fascinating story of electricity from those early days when it was called the amber soul to the present time is told by the accomplished author, not only with scientific accuracy, but in language and illustration which gives it the interest and charm of the most fascinating romance. The application of this "life of nature" to the uses of man in the transmission of thought and language, to the illumination of our houses and streets, the driving of machinery and the cure of disease, has annihilated time and space, and rendered possible in the future the wildest dreams of the magician. The greatest triumphs of mind over matter will undoubtedly in the future, as in the past, be shown in utilizing this subtle but all-powerful agent. Familiar as is much of the subject treated to the students, the facts are so presented as to possess a charm to all.

AMERICAN MEDICINAL PLANTS. By Millspaugh. New York, Boericke & Tafel.

We have already spoken in terms of warm commendation, not only of the artistic beauty of the illustrations but also of the admirable description of the plants, and the clear and concise statement of their physiological action. The present Fascicle, the fifth of the series, contains thirty full-page illustrations, with letter-press descriptions, and although many of the plants are seldom used in medicine, for lack of sufficient proving, yet what is known of them may be sufficient to stimulate the prover to a more full development of their virtues. Fascicle six, which will appear in a few months, will complete the work, which commends itself, not only from its artistic beauty but scientific value, to every physician who would be thoroughly familiar with the drugs he uses in his daily work.

FIFTY CASES OF ABDOMINAL SECTION. Second Series. James B. Hunter, M. D. Reprinted from the *New York Medical Journal.*

The object in presenting this second half hundred cases of abdominal section to the profession is to "afford addi-

tional evidence in favor of operating in some doubtful cases, in some bad cases, and in some cases where the diagnosis has to be made chiefly from the symptoms." It is therefore the privilege of the profession to examine Dr. Hunter's work and judge it according to the standard which he himself has placed upon it. Will these fifty cases, with the results obtained, assist the young surgeon or give confidence to the older operator? Will they really add anything to our knowledge of abdominal sections? It was long ago laid down as an unwritten law of surgery, that the surgeon who refused to operate upon a case because the results were doubtful, became morally responsible for depriving his patient of her one chance of living; and we cannot see that in these fifty cases Dr. Hunter has added force to the obligation which every conscientious surgeon feels, or presented doubtful cases in such a light as to render further diagnosis more certain. Dr. Hunter is a skillful operator, and his results are probably as good as other surgeons can produce, and still a mortality of fourteen in fifty seems very high. True, many of the cases were extremely bad cases, but, on the other hand, some of the cases do not seem to have presented any unusual complications. On the whole, we cannot find that these cases prove one thing or the other. They seem to be purely negative—records of brilliant surgery, but valuable chiefly as illustrations of the operator's skill and methods of operating.

PRINCIPLES OF HYGIENE. Together with so much of Anatomy and Physiology as is necessary to the correct teaching of the subject. By Ezra M. Hunt, A.M., M.D., Sc.D., Tenth President of the American Public Health Association, Secretary of the State Board of Health of New Jersey, and Instructor in Hygiene in the New Jersey State Normal School. 12mo. 400 pages, cloth, illustrated. Ivison, Blakeman, Taylor & Company, publishers, New York and Chicago.

The author has been impressed with the view that, for the average scholar, a knowledge of Hygiene is far more important than that of human structure and organs, and that the present courses of study justify the teaching of these to children only to the degree necessary for an intelligent practice of the health-preserving art.

THE CENTURY FOR JANUARY.

The Americanism of *The Century* is exhibited in the make-up of the January number. Except a short communication, it is wholly written by Americans.

In "Topics of the Time" are three editorial articles: "A Tyranny that Cannot Live in America" deals with the tyrannical and dead-level features of the Labor Problem; "The Blot on the 'Scutcheon" presents three reasons why the long struggle for International Copyright law should be continued during the present session of Congress; "How Prohibition Grows" is addressed both to the Prohibitionists and to their opponents.

Following his paper on the Food Question, in the December number, Mr. Edward Atkinson contributes another on "The Relative Strength and Weakness of Nations," being the first of "Two Studies in the Application of Statistics to Social Science." The article is a rich storehouse of facts which are set before the reader in a manner easily to be grasped, by means of graphic diagrams. Among the far-reaching and suggestive conclusions of Mr. Atkinson's paper, one of the most striking is that, in the face of the competition of a free people, having such a record of material prosperity, European nations must "disarm or starve."

In a paper on "Comets and Meteors," in the "New Astronomy" series, Prof. S. P. Langley, the astronomer, gathers up the most recent scientific knowledge of his subject, illustrating it by graphic comparisons which quickly awaken the imagination of the reader. Among the pictures are wood-cuts of comets and of a meteoric shower.

"Fencing and the New York Fencers," by Henry Eckford, relates to a sport which has lately had a marked growth in New York, and which the writer denominates "the fine art of athletics." The history and the different schools of fencing are discussed, and the paper sparkles with illustrative drawings by Birch.

Another sport of an older American pedigree than fencing is described in "An Indian Horse Race," by C. E. S. Wood, with an illustration by Farny.

CORRESPONDENCE.

NON-SECTARIANISM IN THERAPEUTICS.

To the Editors of the N. Y. Medical Times:

Some time ago this journal had the wisdom and the courage to drop its distinctive title and to plead for a liberal non-sectarian basis for therapeutics as the only stand to take in the science and art of medicine—the only stand to keep abreast of the science of the day. I do not think I state its position too strongly.

Progress and liberty never had the intensity of meaning which they now have. We are moving onward with rapid strides with a spirit of progress, which is carrying us on by its own *vis inertia*. We must have *nolens volens*. Many who have gotten into side currents are being swept back into the main stream despite their strugglings to maintain their original course. Those who have succeeded in resisting it are left behind in stagnant pools.

The history of medicine may be likened to a great river, flowing now slowly, now rapidly, on to the sea, with many lesser streams seeking new channels, but which must ever return sooner or later to the parent stream, and bearing with them often much which the main current failed to pick up in its steady but certain flow. The current of homœopathy which started out in its own course a century ago is now working its way back into the main stream. Many who are back in it fail to realize or do not wish to realize that they have become a part again of the great river. How many of us to-day are in this position?

It behooves every one who finds himself in a false position to right himself as soon as he can. Whoever has been so unfortunate as to bind himself to any prescribed course of action without knowing at the time what all that course implies, the sooner he finds out his position and mistake the better. However necessary it is for a young man to shape early his life's work he should be chary of stereotyped views and opinions, and should be always open to conviction and ready to change those views when increasing knowledge and enlarged experience compel him to do so. It is not in the nature of things that we should go through life feeling and thinking the same, and come out at the finish as we entered at the start. Let every young man starting out in medicine bind himself to no dogmas, no medical theories; let him bind himself to nothing but honest study and hard work, and let time, which brings experience and increased knowledge, shape

whatever opinions and theories he may form. For some time I have felt impelled to free myself from a position which I knew to be a false one. The old saying, "Practice what you preach," may well be reversed to "Preach what you practice."

My position is simply this: I was graduated by a homœopathic medical college. I started out with absolute confidence in the law of similars and the efficacy of high potencies. The first change was to come down from the clouds on to *terra firma*. Gradually I found myself going outside the legitimate limits of homœopathy and using drugs on general principles and the results of the experience of the general profession. To-day I am using whatever I please—whatever I think will benefit my patients. It is nonsense and wrong for me to be called a homœopathic physician. I am glad to say I never had any distinctive title on my sign, and for some time I have repudiated the name of homœopath. I use many remedies which are called "homœopathic," but to-day every one of them can be found in the materia medica of the general profession, and their spheres of action and usefulness fairly well expressed. The dominant school is skimming off the cream about as fast as it rises.

The science of medicine, like the science of life, though compassed round by the exact sciences, encroaching more and more upon it every day, is still very far from being a positive science. There is a large domain of conjecture, doubt, mere theory, mere speculation, a *terra incognita* for a long time to come. We can start out to be physicists or chemists with a great deal cut and dried for us; we can start out to be physicians with much certain knowledge, thanks to eighteen hundred years of labor and scientific research; but we shall find ourselves continually stepping upon ground uncertain of a firm foothold. The sooner we feel this uncertain ground the better.

Had I a son to be educated for medicine, I should send him to one of our first medical colleges, where he could get the advantages which they alone can give. When fathers have asked my advice as to where they should send their sons, I have said: "Send them to a large medical center—as New York, Philadelphia or Boston—to colleges which are known the world over, and whose facilities America may well be proud of. Let them become regular physicians, hampered by no schools, no systems, no therapeutic dogmas. Let them be within the pale and not outside it. Let them be physicians without any qualificative—physicians who can practice what their knowledge, their experience and their conscience may dictate."

Could I go back ten years I should matriculate at that college which offered the greatest talents and the largest clinical facilities, and study materia medica to suit myself. Not that I in the slightest degree undervalue the importance of the chair of therapeutics, but that I am persuaded that the only abiding knowledge of the use of drugs comes after a young man has started out in practice for himself and has tried the effects of drugs at the bedside. Whatever he may learn of drugs at college is hardly the first step. He should read many authors, if for nothing else than to realize "many men of many minds." He should study drugs from every standpoint, and should be free to use them within the limits of prudence and common sense so far as such limits can be mapped out. Liberality and independence are more important in medicine than in any other profession or walk in life. If we were all sure that there was but one universal law of cure, and that we had discovered it and had satisfactorily formulated it, the practice of medicine would be a very different thing from what it now is. But I must class myself with those who believe that a positive science of drugs can only be obtained by omniscience, by a complete unraveling of life itself—a goal in the future so distant as practically an impossibility.

Far be it from me to depreciate Samuel Hahnemann and his work. I have as great an admiration for him as I ever had. He was a very learned man and a keen observer. He taught much that was in advance of his time. But the general medicine of to-day is a very different thing from the medicine of a hundred years ago. The thousands of honest workers since then have not worked altogether in vain, and we can thank God for much which enables us to help suffering humanity. It is unnecessary to go into details here.

Far be it from me to cast any reflection upon my Alma Mater. Her faculty was composed of honest, capable men, and I have nothing but pleasant memories associated with my student life. To my preceptor, Dr. E. A. Farrington, I owe more than I can express, and I shall hold him in grateful remembrance as long as memory lasts. His untimely death was a shock to all who had had the privilege of his friendship and instruction.

If we take a general survey of the New School we can divide it into three classes. First, a very small class, getting smaller every day—you can almost count the number on your fingers—composed of strict Hahnemannians who use nothing outside the strict limits of homœopathy. Second, a much larger class, those who are constantly encroaching upon general medicine, using a great many remedies outside the limits of similia, and yet who consider themselves homœopathists, and who try to explain their inroads by the law of similars. They must keep up a constant whistling to avoid losing their courage and faith. And third, a class not so large, perhaps, as the second, yet growing larger and larger every day, those who see they have no rights to the title and are willing and glad to give it up. They are ready to use anything which science can prove to them to be good. They should be regarded as regular physicians, and should reap all the benefits accruing therefrom.

The professional disadvantages attending the New School have been already well set forth in this journal. They are especially evident in the smaller cities and towns.

Its members are debarred from professional contact with regular physicians and their societies. Nothing does one so much good as association with colleagues. It brings out deficiencies and is a constant source of instruction.

They are debarred from hospital practice which offers so many advantages.

They are mostly cut off from civil positions calling for professional knowledge and skill.

They are made to feel themselves aliens, not to say outcasts.

The separation is a source of much bitter feeling and animosity, and I fail to see how the truth is advanced by it.

All I would contend for in this letter is that in the practice of medicine the only standpoint should be that of complete freedom and liberality; the use of all means which science can prove to us to be good; the discarding of all distinctive titles as applying to the use of drugs, and the free intercourse of all physicians who are worthy to be called educated men and gentlemen.

Respectfully,

SAVANNAH, Ga. E. R. CORSON, M. D.

TRANSLATIONS, GLEANINGS, ETC.

Sepulture versus Cremation.—Dr. George Hay has an article under this heading in the *Therapeutic Gazette* for October 15, 1886. "Putting aside all special pleading, in which the literature of this subject too much abounds," the writer thinks that from the considerations he advances, several conclusions may be drawn.

1. Considered merely as a measure of sanitation, cremation as a means of disposing of the dead is perfect when properly performed.

2. As a measure of sanitation, when properly performed and under proper conditions, sepulture, as a means to the same end, is also perfect.

3. As an economic measure, cremation is faulty in the extreme, being wasteful and destructive.

4. As an economic measure, sepulture is much less faulty than cremation, being to a certain extent conservative.

5. As a testificatory measure, cremation cannot be entertained at all, for it completely destroys all physical testimony in cases of crime which the cadaver might afford.

6. As a testificatory measure sepulture, to a certain extent is satisfactory, for its tendency is to conserve the physical evidences of crime.

Measurements of Body Surfaces.—According to some measurements made by P. Putilov, of Omsk, the surface of a man's head is twenty-seven times as large as that of an average child at birth, while the trunk and the upper and lower limbs have respectively 7.5, 7 and 10.8 times the superficial area in the adult that they have in the infant. The mucous membrane of the respiratory apparatus appears to increase much more than that of the esophagus, the former measuring 13.5 times as much in the adult as in the infant, while the latter only measures 4.7 times as much. The stomach is 50 times and the small and large intestines 18 and 22 times as large. The internal surface of the digestive canal is given as 1,200 sq. cm. in the baby and 18,300 sq. cm. in the adult, and the surface of the liver is 199 and 774.5 sq. cm. in the two bodies respectively, that of the adult being 3.9 times that of the baby.

The Surgical Power of Faith.—Dr. Boardman, in his book entitled "The Great Physician," relates a remarkable instance of the healing of a fractured arm. The patient was the little son of a well-known physician of Philadelphia, and the account is published as it was given by the father. He said: "The children were jumping off a bench, and my little son fell and broke both bones of his arm below the elbow. My brother, who is a professor of surgery in a college at Chicago, was here on a visit. I asked him to set and dress the arm. He did so—put it in splints, bandages and a sling. The child was very patient and went about without a murmur all that day. The next morning he came to me and said, 'Dear papa, please take off these things.' 'Oh, no, my son, you will have to wear these things five or six weeks,' I replied, 'before it will be well.' 'Why, papa, it is well.' 'Oh, no, my dear child, that is impossible.' 'Why, papa, you believe in prayer, don't you,' he persisted. 'You know I do,' I said; 'why do you ask?' 'Well, last night when I went to bed it hurt me very bad, and I asked Jesus to make it well and it is well.' I did not like to say a word to chill his faith. A happy thought came. I said, 'My dear child, your uncle put the things on, and if they are taken off he must do it.' Away he went to his uncle, who told him he would have to go as he was six or seven weeks, and he must be very patient; and when the little fellow told him that Jesus had made him well, my brother said, 'Pooh! pooh! nonsense,' and sent him away. The next morning the poor boy came again to me, and pleaded with so much sincerity and confidence that I more than half believed that he was really healed, and said to my brother: 'Had you not better undo his arm and let him see for himself? Then he will be satisfied. If you do not, I fear, though he is very obedient, he may be tempted to undo it himself, and then it may be worse for him.' My brother complied, took off the bandages and splints, and exclaimed, 'It is well—absolutely well!' and hastened to the door for air to keep from fainting."

The Surgery of the Lungs.—Dr. Truc, in a thesis discussing the present status of surgery of the lungs, shows that pneumatomy, partial or total, practised antiseptically, is generally well endured by the different animals, and is compatible with life. In general, applied to the treatment of tuberculosis, the operation has hitherto given deplorable results, while as an operation for secondary cancer of the lung, circumscribed and superficial, it seems useful and little dangerous. The operation may be further advantageous:

1. In certain abscesses producing serious complications, their location being well established.

2. In circumscribed abscesses producing infection, their location being exactly determined.

3. In localized severe putrid bronchitis.

4. In rare forms of limited tuberculosis, represented by an isolated superficial cavity, the septic products of which occasion septic symptoms which directly endanger the life of the patient.

5. In large hydatid cysts which are not spontaneously relieved nor yield to the ordinary methods of cure.

6. In cases of intrapulmonary foreign bodies which have resisted ordinary means for their removal, and produce inflammatory symptoms of destruction of the parenchyma, their locality being known with precision.

Dr. Truc further concludes that exploratory puncture, carefully made, is generally harmless, and frequently of great diagnostic value.

A Substitute for Fehling's Solution.—Professor Holland gives the following as a test for sugar; it is very efficient, easily prepared, and is not spoiled by keeping:

Cupric sulphate	ʒ 1
Glycerine	℥ 1

To make the test, add five drops of this solution to one drachm of liquor potassæ in a test-tube. Boil a few minutes to test the purity of the fluid. Should it remain clear, then add a few drops of urine. If glucose be present in quantity there is at once thrown down a red precipitate, just as in the ordinary Fehling test. To detect minute amounts of sugar, not shown by the above procedure, after making the test as above, add half a drachm of urine; boil and set aside. If the sugar be present in even very minute quantities, the liquid as it cools will turn to an olive-green color and become turbid.

Infant Mortality.—Dr. H. C. Haven, in an article on the etiology and treatment of the summer diarrhœa of infants

(*Arch. of Pediatrics*, July, 1886), remarks as follows: "Many philanthropists who favor the erection of the large so-called tenement houses, do not recognize, it seems to me, the inevitable increase of mortality among infants, which comes from the aggregation of people in large numbers, however thorough may be the sanitary arrangements, as compared—that is—with small and isolated tenements or houses. I believe that this is one reason why in Philadelphia, the second largest American city, but where the tenement house system is practically unknown, the difference in infant mortality is so striking. In 1878, out of sixty American cities, Philadelphia had the lowest per cent. of deaths under five years to aggregate deaths, it being 17.97; Brooklyn, 47.80; New York, 45.95; Boston, 39.16."

Tar as a Coating for Floors—Has been tried in Austrian military barracks, and has proven so valuable as a means of preventing accumulation of dust in cracks, and improving in other ways the sanitary condition of the rooms, that its application is being greatly extended. It requires renewal but once a year, and is very inexpensive. Its sombre color is its only disadvantage.

Hernia Treatment.—Lawson Tait, in the *British Medical Journal*, gives his method for the radical cure of umbilical hernia by abdominal section, and considers it applicable to all other forms of hernia. He opens the sac, frees all adhesions, cuts off omentum that may be in the way, pares the edges of the ring, and stitches up the wound with continuous silk thread, which he leaves permanently. The results have been exceedingly satisfactory.

Anesthesia by Suggestion.—Dr. Pitres relates, in the *Journal de Medicine de Bordeaux*, a case which well illustrates the power of hypnotic suggestion in producing anesthesia. The patient was a hysterical woman, easily hypnotizable, who was suffering from a very painful phlegmon of the left thigh, following a hypodermic injection. The abscess was the seat of acute shooting pains, and could not be touched without causing the patient to scream Dr. Pitres proposed to put the woman to sleep by hypnotism, then to order her to allow the abscess to be opened without feeling any pain, either during or after the operation, and finally to wake her up and make the incision. This was done as proposed; a dissection was made down upon the abscess, which was emptied of the pus, cleaned and dressed. During all this time the patient watched the proceedings with a smile, and expressed astonishment that the abscess could be opened without giving her the slightest discomfort.

Sign of Abortion.—According to Dr. R. W. Wilcox (*Quar. Bull. Clin. Soc., N. Y. Post-Grad. School.* Feb., 1886), a sign of abortion, believed to be pathognomic, is the so-called funnel-shaped cervix. After the fœtus has been expelled the cervical canal contracts, the internal os more rapidly than the external, so that on examination one feels the external os open, passing into the cervical canal, the gradually approaching sides of that canal, and at last the smaller internal os. This condition is believed to be a positive indication that the fœtus has been expelled, but not necessarily that the uterus is empty. This sign is more marked in abortions occurring during the first five months of pregnancy, and is usually persistent for at least a week after the complete emptying of the uterus of its contents. In cases where the history does not afford much light this seems to be a good working fact.

Splenectomy Growing in Favor.—At a recent meeting of the Medical and Chirurgical Society, London, Mr. Knowsley Thornton read a paper in which he related the particulars of two cases in which he had performed splenectomy. One ended fatally from internal hemorrhage following the operation. In the other, complete recovery ensued, but the girl acquired an enormous appetite. In had been noted in animals that the running and appetite were increased after the performance of experimental splenectomy.

Indestructible Paste for Closing Letters.—Letters or envelopes which it is desired to protect against unauthorized opening, by moistening the pasted portion, may be securely sealed by using a solution of oxide of copper in ammonia as paste. This liquid has the faculty of dissolving cellulose. When applied to the paper it dissolves on the surface, and on drying the two partially dissolved surfaces adhere indissolubly together.

The same thing may be accomplished by using water-glass (silicate of soda or potassa). In this case, however, the chemical action is different.

Treatment of Angiomata.—The *Weekly Medical Review* says that favorable results from the employment of Merck's method for the cure of angiomata are reported by Negretto. The method consists in painting the angioma with a mixture of collodion and corrosive sublimate. The whole surface affected receives four coats of the solution. The application is renewed every fourth day until the angioma is cured. Negretto reports success in two cases of vast teleangiectasis of the face. A small portion of the tumor only was painted at a time. The application is not advisable where mucous surfaces are involved. Merck's formula is four parts of corrosive sublimate to one of collodion. Negretto finds that two parts in thirty answer. A very good cicatrix results.

Paralysis Agitans Without Shaking.—Dr. Beevor related several cases of paralysis agitans without tremor, in a paper read before the Medical Society of London. In these cases, fixed attitude, rigidity of the neck with difficulty in looking up, expressionless countenance, slow delayed movements, difficulty in rising from the sitting posture, monotonous and mumbling speech, were present. The writing in nearly all cases was wavy; retropulsion, apropulsion was frequently present. Charcot, Buzzard and Gowers have published cases of this kind. It seems possible for paralysis agitans to run its course without any tremor being present.

Condiments for the Sick.—Dr. W. A. Hammond writes as follows: It is rarely the case that sufficient attention is given to the use of condiments in the sick-room. They are often altogether excluded, or the patient is allowed to take them at his discretion, whereas much benefit will frequently be obtained by the judicious employment of these important agents. In certain low fevers of typhoid type, and in almost all malarial disorders, condiments may be largely used with advantage. Probably no one of them is

more generally efficacious than black pepper. Mustard is also frequently relished; and we all know how grateful to us in our illnesses a little vinegar has been. In inflammatory affections of the stomach and bowels the stronger condiments, such as cayenne pepper, mustard and horseradish are seldom admissible; but many cases of diarrhœa are very decidedly benefitted, especially when they occur in persons who have somewhat run down in general health, by black pepper, cayenne or mustard taken in quantities far above those which a healthy person would be likely to ingest. I have frequently known severe cases of diarrhœa to be cut short by a few doses of twenty or thirty grains each of cayenne, taken in either a little water or syrup. Black pepper is well known to be a remedy of no mean power in the common fever and ague of this country. It will often cut short attacks with as much promptness as would large doses of quinine.

Theine as a Hypnotic.—Dr. J. B. Andrews (*Am. Jour. Insanity*, October, 1885) has experimented with theine, or, as he terms it, camellia. He found that it reduced the pulse ten to twenty-four pulsations per minute, increased its force and volume, and raised the arterial tension. The effects began in a half hour to an hour after its administration, were maintained at the maximum about an hour, and then began to decline, the normal being restored in about three hours.

Dr. Thomas J. Mays, after a study of the same subject, concludes that theine is a powerful anodyne without producing any intoxication of the higher nerve centers which is so common with morphia and all other agents belonging to this class. Its influence is both quick and persistent, and it manifests an almost exclusive affinity for the sensory nerves. It relieves pain by acting from the center toward the periphery, and showing its effects but very seldom above the seat of injection. This is precisely in harmony with what was found in the experiments on the lower animals. In one-tenth, one-fifth and even one-third grain doses it is entirely free from dangerous consequences—the only inconvenience which it causes is a slight and transient burning at the point of introduction. He uses a one per cent. watery solution of Merck's preparation, ten minims of which equal one-fifth of a grain of theine. Larger doses are required in some individuals in order to bring out its characteristic action.

Hypertrophy of the Male Mammary Gland During Phthisis.—Blomfield calls attention to a uniform enlargement of one or both of the male mammary glands on the course of phthisis, this enlargement being accompanied by pain and tenderness. It appears to differ from tuberculosis of the breast. It consists apparently in a general augmentation of the volume of the gland without local induration, without any coloration of the skin, without adhesions and without any axillary glandular enlargement, accompanied by a non-radiating spontaneous pain. The commencement is unknown. One gland is generally attacked. It increases in size slowly, and then decreases. It never gives rise to suppuration.

A New Method for Anesthetizing the Uninjured Skin with Cocaine.—Dr. Wagner, at the meeting of the Society of Physicians at Vienna, held February 5, 1886 (*Wien. Med. Blatt.*), described a method by which the uninjured epidermis might be rendered anesthetic through the application of cocaine. For this purpose he made use of the property of a galvanic current discovered by Dr. Haertner, in consequence of which fluids move from the positive to the negative pole. If the positive electrode is dipped in a cocaine solution and placed upon the skin, and the negative pole placed a short distance from it, and a current allowed to pass, the skin lying between these two points of application of the electrode becomes anesthetic. Wagner made a number of experiments to determine the value of this method to surgical practice in the clinic of Professor Billroth, and found that by its means such anesthesia as would prevent the appreciation of incisions of the skin was readily attainable.

Ice in the Sick Room.—A correspondent of the *National Druggist* thus writes:

The writer's son suffered with typhoid fever during the heated term of last summer, when the temperature of the room often rose to 90° or 95°, and the patient's temperature ran up to 105° F. and over.

A number of tubs were placed in the room and kept filled with ice, and the doors kept closed. The temperature of the room sank to 80° or less, an average of 12° or 15° below the temperature of the other rooms in the house, and the cooler atmosphere not only added to the comfort of the patient, but aided in keeping down the body temperature, and materially contributed to a final recovery.

We would strongly urge the use of ice in the room as a measure of comfort and luxury for all who are confined to their beds during hot summer days.

Nasal Catarrh.—J. Solis Cohen says that the two great principles in the treatment of naso-pharyngeal catarrh are to keep the parts clean, so as to let them have a chance to get well themselves, and to take care of the general health.

Antiseptic Tooth-Powder.—A. D. MacGregor, M. B., in *British Med. Journal*, recommends the following: Boric acid, finely powdered, 40 grains; chlorate of potassium, ʒ ss.; powdered guiacum, 20 grs.; prepared chalk, ʒ 1; powdered carbonate of magnesia, to ℥ 1; otto of roses, half a drop. The boric acid in solution gets between the teeth and the edges of the gums, and there discharges its antiseptic functions; the chlorate and guiacum contribute their quota to the benefit of the gums and mucous membrane generally; the chalk is the insoluble powder to detach the particles of tartar which may be present, and the magnesia the more soluble soft powder which cannot harm the softest enamel.

Professor Von Gudden.—A gratuity of $50,000 has been granted by the Bavarian Government to the widow of this distinguished man, who lost his life in his attempt to rescue the insane king.

Rhus Poisoning.—Among the numerous applications for the erysipelas produced by the poison ivy, one of the most simple is a mixture made of sulphate of zinc, half an ounce, with eight ounces of olive oil. Prompt relief *usually* follows the application.

XUM

MISCELLANY.

—Dr. Williams of St. Louis thus explains the necessity of having two ears: "Sound travels by waves radiating from a central point of disturbance, like the wavelets caused by dropping a pebble into still water. So far as the hearing of each individual is concerned, these waves move in a direct line from the cause of sound to his ear, the impact being greatest in the ear that is nearest to the source. The effect, in this respect, of the total loss of hearing in one ear was forcibly illustrated by the statement of a patient who consulted me recently. He lived in a wild portion of Tennessee, and spent a good deal of his spare time in the woods hunting squirrels, accompanied only by his dog. An explosion suddenly destroyed the hearing in one ear. After this accident, while in the woods, he found that he could hear his dog bark, but for the life of him he could not locate the direction of the sound, even when quite close to him, and he was compelled to take his little boy along with him to find the dog. After a time persons learn to correct, to a limited extent, the errors in estimating distances after the loss of vision; but the effect of the loss of an ear upon the estimation of the direction of sound is never corrected."

—Out of a total of 10,276 cases of cholera, officially reported to have occurred in Japan during the first half of the year 1886, no less than 7,803 or 76 per cent. proved fatal.

—Pereira, in his work on materia medica mentions dynamization; he says: "some substances exercise a most potent influence over the organism without producing any obvious mechanical or chemical changes in organic tissues. Such substances are said to act *dynamically*, as hydrocyanic acid, morphia, strychnia, etc."

—A gem from the president's address at the Brit. Med. Asso.: "A man's fate all depends on the nursing—on the mother, not on the father.

—Gambetta's brain weighed only thirty-eight and four-tenth ounces.

—M. Eliseff presented to the French anthropological society a woman with a caudal appendage covered with hair. This anomaly was present in several of the maternal ancestors of the woman.

—Nine of the nineteen licensing bodies in Great Britian are now open to female medical students.

—The Danish government has created a medical commission to investigate and report upon the causes of cancer, and particularly the supposed association between the disease and the use of certain sorts of food, the influence of worry, anxiety, and a depressed state of health in giving rise to the malady, and the extent to which it is hereditary.

—Dr. Strong, chief of staff of the W. I. Hospital, reports 593 patients treated during the month of November, with a death-rate of 3.04 per cent.; 3,457 patients have been treated since January 1st., with a mortality of 7.35 per cent.

—Dr. H. I. Ostrom has recently received the appointment of surgeon to the Hahnemann Hospital in the place of Dr. Helmuth, resigned. The House of the Good Samaritan Diakonissen, was opened on the 14th of December with a successful operation by Dr. Ostrom on a case of lacerated perineum. The case was more difficult from the fact that two previous unsuccessful operations had been performed in another city.

—Dr. Mayer, formerly an interne in the Charity Hospital, Ward's Island, has recently been appointed by the Governor of Kentucky a member of the State Board of Health. Dr. Mayer, by his industry and skill, is taking a front rank in the profession in his State, and this appointment will enable him to do good work in the field of hygienic and sanitary science.

—Dr. Alice Kerr is the first woman to obtain a diploma in the Edinburgh and Glasgow Colleges of Physicians and Surgeons, which opened their examnations to women a short while ago.

—The esthetics of the sick-room have received an impulse from Mr. Lawson Tait, who is said not to accept homely women as nurses for his patients.

—The sales of *The Century Magazine* have gone up over 30,000 copies in six weeks, since beginning the Life of Lincoln. A veteran New York publisher predicts that the permanent edition of the magazine will go beyond 300,000 before the completion of the Lincoln history. The January installment is said by the editors to be of most surpassing interest, and occupies thirty pages of the magazine.

—Our colleagues will please bear in mind in referring patients South, that the veteran Dr. H. M. Cleckly survived the earthquake, and still resides in Charleston, S. C.

—In a late number of *Nature* Edward L. Nichols and E. H. S. Bailey publish the results of a series of experiments designed to test the delicacy of the sense of smell. Their conclusions show that this sense is in general much more delicate in men than in women. The substances used in the tests were cyanide of potassium, bromine, extract of garlic, nitrate of amyl, oil of cloves, prussic acid, oil of lemon and oil of wintergreen. A series of solutions of decreasing strength, until it was impossible to detect the substances by smell, was employed. It was found that to detect the presence of cyanide of potassium one part in 109,140 parts of water was required for the male observers, and one part in 9,002 parts for the other sex, a proportion of more than twelve to one in favor of the former. To detect bromine the proportion was more than three to one; for extract of garlic, a little less than six to four; for nitrite of amyl, nearly eight to three, and for oil of cloves, over eight to five. Of all the substances used it will be observed that woman is most sensitive to the last named. For prussic acid, oil of lemon and oil of wintergreen the proportions were over six to one, nearly three to one and a little over two to one, respectively. In no instance was the sense of smell found to be more delicate in woman than in man. Other interesting facts were also brought out in the experiments. It was discovered that some individuals of both sexes were unable to discover prussic acid in solutions that were strong enough to nearly overpower others. Others again could detect it in solutions so weak that chemical tests failed to show its presence. As we have remarked, these results are unexpected, for the universal supposition has been that women are more sensitive to both agreeable and unpleasant odors.

—Probst says: "By means of the paths of nervous communication between the brain and the body, the mind may be said to be universally present in the body."

—Cuticura ointment consists of a petroleum jelly colored green, flavored with bergamot and containing two and a half per cent. carbolic acid.